

LOK SABHA

THE PATENTS BILL, 1965

(Report of the Joint Committee)

(Presented on the 1st November, 1966)



**LOK SABHA SECRETARIAT
NEW DELHI**

November, 1966/Kartika, 1888 (Saka)

Price : Rs. 2.75

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JOINT COMMITTEE ON THE PATENTS BILL, 1965
COMPOSITION OF THE COMMITTEE

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bado
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
12. Shri H. K. V. Gowdh
13. Shri Kashi Ram Gupta
14. Shri Prabhu Dayal Himatsingka
15. Shri Madhavrao Laxmanrao Jadhav
16. Shri Mathew Maniyangadan
17. Shri M. R. Masani
18. Shri Braj Behari Mehrotra
19. Shri Bibudhendra Mishra
20. Shrimati Sharda Mukerjee
21. Shri P. S. Naskar
22. Shri Chhotubhai M. Patel
23. Shri Naval Prabhakar
24. Shri R. Ramanathan Chettiar
25. Shri Sham Lal Saraf
26. Shri A. T. Sarma
27. Dr. C. B. Singh
28. Dr. L. M. Singhvi
29. Shri P. Venkatasubbaiah

30. Shri K. K. Warior
31. Shri Balkrishna Wasnik
32. Shri Ram Sewak Yadav

Rajya Sabha

- *33. Shri Arjun Arora
- *34. Shri T. Chengalvaroyan
35. Shri Babubhai M. Chinai
36. Shri Vimalkumar M. Chordia
- *37. Shri R. S. Doogar
38. Shri D. P. Karmarkar
39. Shri B. T. Kulkarni
40. Shri P. K. Kumaran
- *41. Shri Shyamnandan Mishra
42. Shri Dahyabhai V. Patel
43. Shri Mulka Govinda Reddy
- **44. Shri D. Sanjivayya
- *45. Shri M. R. Shervani
46. Dr. M. M. S. Siddhu
- *47. Shri Dalpat Singh
48. Shri R. P. Sinha.

LEGISLATIVE COUNSELS

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department, Ministry of Law.*

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D., (Patents).*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*
3. Shri B. N. Atrishi, *O.S.D.*
4. Shri R. V. Pai, *Joint Controller of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

*Ceased to be Members of the Joint Committee with effect from 2nd April, 1966 on their retirement from Rajya Sabha and were reappointed by Rajya Sabha on the 7th April, 1966 except Shri Dalpat Singh who was reappointed on the 13th May, 1966.

**Appointed on the 17th May, 1966 *vice* Shri T. N. Singh resigned.

REPORT OF THE JOINT COMMITTEE

1. The Chairman of the Joint Committee to which the Bill* to amend and consolidate the law relating to patents was referred, having been authorised to submit the report on their behalf, present their Report, with the Bill as amended by the Committee, annexed thereto.

2. The Bill was introduced in Lok Sabha on the 21st September, 1965. The motion for reference of the Bill to a Joint Committee was moved in Lok Sabha by Shri T. N. Singh, Minister of Heavy Engineering and Industry in the Ministry of Industry and Supply on the 22nd November, 1965. The motion was discussed and adopted on the 25th November, 1965 (Appendix I).

3. Rajya Sabha discussed, and concurred in, the said motion on the 10th December, 1965 (Appendix II).

4. The message from Rajya Sabha was published in the Lok Sabha Bulletin, Part II, dated the 13th December, 1965.

5. The Committee held thirty sittings in all.

6. The first sitting of the Committee was held on the 11th December, 1965, to draw up a programme of work. The Committee, at this sitting, decided that a Press Communique be issued advising associations, public bodies and individuals who were desirous of presenting their suggestions or views or of giving evidence before the committee in respect of the Bill, to send written memoranda thereon by the 12th January, 1966.

7. Seventy memoranda/representations on the Bill were received by the Committee from different associations/individuals as mentioned in Appendix III.

8. At its seventh sitting, the Committee also decided to form Study Groups to visit some of the modern pharmaceutical units etc. with up-to-date laboratory facilities, in different regions of the country, for an on-the-spot study of their working in so far as it had a bearing on the provisions of the Patents Bill.

9. The Committee divided itself into several groups and visited 30 Pharmaceutical Units, Research Institutes and Drug Farms etc.

*Published in the Gazette of India, Extraordinary, Part II, Section 2, dated the 21st September, 1965.

situated at Bombay, Baroda, Poona, Calcutta, Chandigarh, Lucknow and Jammu including the Patent Office at Calcutta (Appendix IV). At these places, the members of the Study Groups of the Committee saw the working of various Pharmaceutical Units and Research Institutes/Laboratories etc. The members elicited information regarding patents and the likely impact of the proposed Patents legislation on their working.

10. At their 2nd to 8th and 10th to 25th sittings held on the 27th to 29th and 31st January, 1st to 3rd February, 23rd April, 1st, 2nd, 4th to 8th and 11th to 15th July, 12th, 26th and 27th August, 1966, respectively, the Committee heard the evidence given by 43 Associations/individuals (Appendix V).

11. The Committee have decided that the evidence given before them should be printed in two volumes and laid on the Tables of both the Houses.

12. The Report of the Committee was to be presented by the first day of second week of the Fourteenth Session of Lok Sabha. As this could not be done, the Committee requested for extension of time upto the 1st August, 1966, which was granted by the House on the 16th February, 1966. As the Report could not be presented on the extended date, the Committee again requested for further extension of time upto 1st November, 1966, which was granted by the House on the 28th July, 1966.

13. The Committee considered the Bill clause-by-clause at their 26th to 29th sittings held from the 5th to 8th October, 1966, respectively.

14. The Committee considered and adopted their Report on the 31st October, 1966.

15. The observations of the Committee with regard to the principal changes proposed in the Bill are detailed in the succeeding paragraphs.

16. *Clause 1 and Enacting formula.*—This clause has been amended to enable the Government to appoint different dates for the commencement of different provisions of the Act. This appears necessary, as the Central Government in view of the additional responsibilities cast on the patent office under the Bill, may not bring all the provisions thereof into force at one and the same time and may bring them into force at different stages so as to enable the patent office to gear up its machinery for the additional functions.

Amendment to the enacting formula is of a drafting nature.

(vii)

17. *Clause 2: (i) Sub-clause (1) (g).*—The definition of 'food' leaves it to be determined by notification as to what would be treated as 'food' for the purposes of the Act. The Committee feel that the definition should be self-contained and that it is not proper to confer such uncanalised powers on the Government. The definition has been amended accordingly.

(ii) *Sub-clause (1) (l) (iv).*—This sub-clause has been amended to make the definition of 'medicine or drug' more practical. The retention of the words "to the extent to which they are used" would have made the implementation of the provisions of the legislation relating to medicine or drug extremely difficult as the extent to which a chemical is used as an intermediate for a drug or for other purposes, such as dyes or plastics, etc. is constantly changing.

(iii) *Sub-clause (1) (m).*—It is considered necessary that existing patents should also be brought generally under the purview of the proposed legislation. Accordingly the definition of "patent" has been modified.

(iv) *Sub-clause (1) (r).*—The amendment made in this clause is consequential to the amendments made in clause 74 which now seeks to recognise the existing Patent Office for the purposes of the new Act.

Other amendments made in clause 2 are of a consequential or drafting nature.

18. *Clause 3 (e).*—Amendment made in this clause is of a drafting nature.

19. *Clause 5.*—It has been strongly represented to the Committee that it should be made clear in this clause that the substance or product manufactured by a patented process or method should be protected under the proposed legislation. Although clause 47(1) (b) seeks to give such protection to the Patentee doubts were expressed that clauses 5 and 47(1) (b) may be held to be inconsistent with each other. In view of the Government policy that patent protection should extend to the products made through the patented process the clause has been amended to make this position clear.

20. *Clause 7: (i) Sub-clause (2).*—The clause has been amended in order to avoid the inconvenience which might be caused to the applicant making an application by virtue of an assignment of the right to apply for a patent in obtaining affidavit from the assignor

or his legal representative. It is felt that the existing practice of requiring proof of the right to make the application would be sufficient.

(ii) *Sub-clause 4.*—The amendment is of a clarifying nature.

21. *Clause 11, sub-clause (8).*—The sub-clause has been amended so that post-dating of an application for a patent or of a complete specification under clause 9(4) and proviso to clause 17(1) and antedating of such application or complete specification under *Explanation* to clause 16(3) are taken into account for purposes of determining the priority date of each claim of a complete specification.

22. *Clause 12, new sub-clause (2).*—The Committee feel that some time-limit should be fixed in the Act itself within which the examiner must complete the investigation of the application and the specification relating thereto and submit his report thereon to the Controller General of Patents. In the opinion of the Committee, a period of eighteen months is ordinarily sufficient for the purpose. The clause has been amended accordingly by adding a new sub-clause thereto.

23. *Clause 15, sub-clause (2).*—This clause required the Controller to refuse an application claiming to be a convention application if it was filed in contravention of Chapter XXII which deals with the international arrangements providing for reciprocity as to patent protection. The Committee feel that refusal of such application under the aforesaid circumstances should not be obligatory and such applications should be treated as any other application for a patent. The sub-clause has been amended accordingly.

24. *Clause 17.*—Amendment of this clause is of a drafting nature.

25. *Clause 21, sub-clauses (2) and (3).*—A redraft of these two sub-clauses in simplified language has been incorporated in the clause.

26. *Clause 22.*—Amendment merely seeks to substitute the correct cross-reference.

27. *Clause 25: (i) sub-clause (1) (a).*—The clause has been amended to enable the assignee of a person from whom an invention is wrongfully obtained to contest an application for the grant of patent in respect of that invention or part thereof. Sub-clause (1) (a) has been amended accordingly.

(ix)

(ii) *Sub-clause (1) (d) Explanation.*—The Committee feel that importation of a product into India for the purpose of reasonable trial or experiment should not be construed as amounting to knowledge or use within the meaning of this sub-clause. The Explanation to the sub-clause has accordingly been modified.

Other amendments in the clause are of a consequential or drafting nature.

28. *Clause 27.*—Amendments made in this clause are of a drafting nature.

29. *Clause 31.*—The Committee feel that the person who derives title from the true and first inventor should be put in the same position as the true and first inventor in regard to anticipation by public display etc. sought to be provided for in this clause. The clause has, therefore, been amended accordingly.

30. *Clause 36.*—The Committee feel that the period of nine months within which the first review of the secrecy directions in respect of an invention relevant for defence purposes, should be reckoned not from the date of the filing of the application for the patent but from the date of the issue of such directions; otherwise in certain cases the period of nine months from the date of application may expire by the time the directions are given and in many cases review may become necessary within a short period after the issue of the directions. The clause has, therefore, been amended accordingly.

A new sub-clause (2) has also been added in order to make it obligatory on the part of the authorities concerned to communicate to the applicant the result of every reconsideration of the secrecy directions.

31. *Clause 37.*—Amendment made in this clause is of a drafting nature.

32. *Clause 39.*—This clause lays down that a resident in India cannot apply for patents outside India unless a minimum period of eight weeks has expired after the application for a patent for the same invention has been made in India. The Committee feel that this period of eight weeks should be reduced to six weeks so that minimum time is lost in getting patents outside India. The clause has been amended accordingly.

33. *Clause 42.*—Amendments made in this clause are of a drafting nature.

(iii) *Sub-clause (1) (n).*—This provision has been amended to bring it into conformity with clauses 39 and 118.

(iv) *Sub-clause (2).*—The Committee feel that the importation of a product into India for the purpose of reasonable trial or experiment should not be construed as amounting to knowledge or use within the meaning of sub-clause (1) (e) and (f). Sub-clause (2) has accordingly been amended.

(v) Other amendments made in the clause are of a drafting nature.

45. *Clause 68.*—The Committee feel that the period of three months plus three months extension of time for filing an application for registration of the deed of assignment of patent rights etc. would be too short a period having regard to the wide relationship which Indian Companies have with foreign patentees. A total period of twelve months from the date of execution of the date of assignment will be reasonable. The clause has been amended accordingly.

46. *Clause 69, sub-clause (3).*—The amendment is of drafting nature.

47. *Clause 74.*—This amendment seeks to recognise the existing Patent Office established under Act 2 of 1911 for purposes of the new Act instead of providing for establishing the Office *de novo*. This will make for continuity in the working of the existing Patent Office.

48. *Clause 77.*—The Committee feel that it is necessary to provide for fixing of some time-limit within which applications for review of Controller's decisions or for setting aside orders passed *ex parte* should be made. The clause has been amended accordingly.

49. *Clause 82.*—This amendment is of a drafting nature.

50. *Clause 84: (i) Sub-clauses (1), (2) and (5).*—The Committee feel that while considering applications for granting a compulsory licence the Controller should also take into account the price at which a patented article is sold in the country.

(ii) *Sub-clause (7).*—The Committee feel that appeals from the decisions of the Controller should lie to the High Court instead of the Central Government. Accordingly, sub-clause (7) has been omitted and necessary amendment has been made in clause 116(2).

51. *Clause 85.*—The omission of sub-clause (iii) will ensure expeditious disposal of applications for compulsory licence, because if

each such application is to be referred to the Central Government it would delay matters.

52. *Clause 86.*—The amendments are of the same nature as the amendments to sub-clauses (1), (2) and (5) of Clause 84 above.

53. *Clause 87.*—The amendments are of a consequential nature and are intended to bring the clause into conformity with the provisions of clause 5 as amended.

54. *Clause 88.*—The Committee feel that there should be no bar on the holder of a licence from the patentee in applying to the Controller for the grant of a licence of right. This brings the clause into conformity with clause 84(2).

55. *Clause 89.*—(i) The Committee feel that application for revocation of patents for non-working should be disposed of expeditiously. For this purpose it is necessary to incorporate a new sub-clause [*vide* sub-clause (4)] stipulating that such application should be disposed of by the Controller ordinarily within one year.

(ii) Other amendments to the Clause are similar to the amendments made in clause 84 (1), (2) and (5).

56. *Clause 91.*—This amendment is of a drafting nature.

57. *Clause 93.*—The Committee feel that the decisions of the Controller should be subject to appeal to the High Court and not to the Central Government. Sub-clause (6) has been amended accordingly.

58. *Clause 95.*—This amendment is intended to clarify that the authorisation to import patented articles under the clause may, in appropriate cases, be made subject to a condition as to payment of royalty and other remunerations to the patentee.

59. *Clause 96:* (i) *Sub-clause (2).*—The Committee feel that the applicant for a licence under a related patent should show that his invention has made a substantial contribution to the establishment or development of commercial or industrial activities in India. The sub-clause has been amended accordingly.

(ii) *Sub-clause (5).*—The Committee feel that appeals from the decisions of the Controller under this clause should lie to the High Court instead of the Central Government. Accordingly, sub-clause

(5) has been omitted and necessary amendment has been made in clause 116(2).

60. *Clause 97.*—The Committee feel that appeals under this clause should lie to the High Court instead of the Central Government. Accordingly, sub-clause (3) has been omitted and the necessary amendment has been made in clause 116(2).

61. *Clause 99.*—This amendment is of a drafting nature as the words proposed to be deleted are superfluous.

62. *Clause 100.*—The proposed amendments are of drafting or clarifying nature.

63. *Clause 104.*—The Committee feel that where a counterclaim for revocation is made by the defendant in a suit for infringement, then the suit along with the counterclaim should be transferred to the High Court for decision. The clause has been amended accordingly.

64. *Clause 107.*—A number of witnesses in their evidence given before the Committee had strongly stressed that provision should be made in the Bill to the effect that when a person, other than the patentee of a patented process, manufactured a product covered by the patented process or imported that product, the onus of proof that the product was manufactured by a process other than the patented process should be on that person. The proposed amendment is intended to secure this purpose.

65. *Clause 116.*—The original clause in the Bill provided that appeals from the decisions and orders of the Controller regarding grant of compulsory licences etc. should lie to the Central Government. The Committee feel, as mentioned earlier, that such appeals should lie to the High Court and the clause has been amended accordingly.

66. *Clause 117.*—The Committee feel that in the disposal of appeals much time should not be taken and are of the opinion that the appeals should be decided expeditiously. Keeping in view this objective a time limit of one year within which all appeals should ordinarily be disposed of, has been proposed.

67. *Clause 126.*—The Committee feel that the constitution of a body like the Chartered Institute of Patents in the U.K. should be considered. This may take some time. Meanwhile as a first step it would be sufficient to provide that the basic qualification for a

patent agent should be a degree of a University and the passing of a suitable test. The Committee also feel that any person who has been practising as a patent agent on the 1st November, 1966 (i.e., the date of the presentation of the Report) should be permitted to enrol himself as a patent agent if he has filed five complete specifications before that date. The Committee also feel that no special benefit should be conferred under this clause on a person who has served in the office of the Controller of Patents as Examiner of patents or in any higher capacity. The clause has been amended accordingly.

68. *Clause 131.*—The amendment is necessary because there is no provision for suspending a patent agent in the proposed legislation.

69. *Clause 140.*—The Committee feel that a period of three months is too short a period to permit negotiations with overseas patentees and regarding the collaboration agreements in India for bringing the existing contract in conformity with the provisions of this clause. It is, therefore, considered that a period of one year for this purpose would be reasonable.

70. *Clause 159.*—*Sub-clause (2) (xiii)* has been omitted as being unnecessary in view of the amendments made in clause 116.

71. *Clause 161.*—The Committee feel that in the case of a patent granted in pursuance of this Clause the period of the patent should be reckoned from the date on which an application is made for revival of the application for such patent under the clause as the applicant is not responsible for the non-acceptance of the application for a patent within the time specified for the purpose in the Indian Patents and Designs Act, 1911.

72. *Clause 162.*—This amendment is intended to secure that the renewal fee payable in respect of patents, under the existing Act would continue to be governed by the provisions of the existing Act. It is also intended to ensure that the suits and proceedings instituted prior to the commencement of the new Act should be disposed of under the provisions of the old Act of 1911.

73. *The Schedule.*—The amendments made are of a formal or consequential nature.

74. The Joint Committee recommend that the Bill as amended be passed.

NEW DELHI;

S. V. KRISHNAMOORTHY RAO,

The 31st October, 1966.

Chairman,

Kartika 9, 1888 (S).

Joint Committee.

MINUTES OF DISSENT.

I

We are constrained to append this minute of dissent to the report of the Joint Committee on the Patents Bill, 1965, because we are strongly of the opinion that all foreign patents should be abrogated.

There is no doubt that the patent system as now prevailing in the country has failed miserably to stimulate Indian inventions or encourage the development and exploitation of new inventions for industrial uses in India.

The law relating to patents now on the Statute Book was enacted in 1911 and it is a relic of the British system to exploit India and after independence since 1948 the need for a more purposive patent law was widely felt. The Government appointed the Committee known as Patents Inquiry Committee which gave its interim report in 1949 and suggested an immediate amendment of the Indian Patents and Designs Act of 1911 to counteract the abuse of patents by foreign firms. This was given effect to in 1950 by an amendment of the said Act. The final report of the said Committee came in 1950 but the bill to amend the patent law further was introduced only in 1953 and even that was allowed to lapse on the dissolution of the First Lok Sabha. The Government was so lethargic on this issue that instead of bringing the previous Bill again in the Second Lok Sabha, they appointed another Committee in 1957 known as Ayyangar's Committee and after a long delay this new Bill was introduced in Lok Sabha in 1965. This shows how the Government is proceeding in this vital matter at snail's pace and allowing foreign firms to abuse the use of patents for their own advantage.

A study of the subject would reveal that the majority of foreigners who have taken out patents do not manufacture their patented products in this country. These patents are used by them only to prevent the Indian manufacturer from going into production of these products.

It is rightly remarked by Justice Ayyangar that "It would not be an exaggeration to say that the industrial progress of the country is considerably stimulated or retarded by its patent system according as to whether the system is suited to it or not" (Report on the

Revision of the Patents Law "Justice N. Rajagopala Ayyangar P. 9). And as Michel observes by patent systems are not created in the interest of the inventor but in the interest of the national economy. The rules and regulations of the patent systems are not governed by civil or common law but by political economy". (Michel on Principal National Patent Systems, Vol. I p. 15).

The object of granting patents for new inventions ought to be to benefit industry and commerce. For this purpose it should not only encourage inventions but promote industry and benefit the consumer. Our present law is an obstacle to our scientists and manufacturers alike. This is evident from the fact that all representatives of the foreign firms have opposed the main provisions of the proposed Bill and the Indian firms have welcomed it.

In abrogating the patents law there is only one danger that of profiteering by businessmen bringing cheap and sub-quality medicines in the market. But this can be checked by Drug Control Laws. If in the last eighteen years our patent laws had compelled the foreign firms to work their patents or suffer their revocation and to make maximum use of Indian raw materials and not merely import penultimate product for merely bottling or packing it here, our pharmaceutical industry would have made tremendous progress.

How and to what extent the existing patent law has proved disastrous for Indian research is evident from the Haffkine Institute case. This Institute was prevented by a foreign firm from manufacturing sulpha-drug by its own patented process while that foreign firm enjoys the protection of importing penultimate product of the drug. What a loss of foreign exchange to our nation? There is also the case of Bengal Chemicals which is contested by foreign firms although the Bengal Chemicals were granted its patent by the Government of India on the process of CHLOPARO-PANUIDE. One witness before the Committee went so far as to say that he apprehended that there would be economic and political pressure by foreign firms on the Government of India to abandon even the present modest Bill and if they succeeded it would spell disaster for India's Pharmaceutical industry.

Another strong argument for abolition of patents is that monopolies have been created by these foreign firms and the poor consumers of India are bled white by very high prices for their drugs This is evident from the statements of the witnesses before the Committee wherein they have cited the vast difference of International prices and Indian prices of imported drugs. A witness stated

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that some time ago Liberium—a tranquillizer—introduced in the Indian market by a Swiss firm, which was importing the same during the year 1963-64 at about Rs. 5555 per kilogram C.I.F.; but the same material is said to have been imported by a firm in Delhi at C.I.F. price at about Rs. 312 per kilogram. Another firm in India has been charging in this country for Vitamin B 12 Rs. 230 per gram whereas the international price at which it is available in other countries is between 90 to 100 per gram. Similarly another firm which holds the patent for DEXAMATHA-ZONE was charging Rs. 60,000 per kilogram. But when warned by the Import Controller it readily cut the price to Rs. 16000. The case of Talbutamide patented by Hoechst is one more example of exorbitant prices charged by foreign firms. It is sold in India at Rs. 187 per 100 Tablets while it is available for Rs. 50 to 60 maximum elsewhere in the world. Chloramphenicol is sold here at high price. It was rightly remarked by Kefauver Committee of U.S.A. that India which does grant patents on drug products provides an interesting case example. The prices in India for the antibiotics, Auromycin and Aeromysin are among the highest in the world. In drugs it is the highest priced nation.

Still another reason for abrogation of patents in India is that there is no reciprocity in the matter. In Appendix "A" on page 302 of the Ayyangar Committee's Report it is stated that the number of patents taken by foreigners in India during 1949 to 1958 was 21,177. The report is completely silent on the patents taken out by Indians in foreign countries. It means and can be presumed that no patents or hardly any patent were taken by Indians in foreign countries. It is thus only one way traffic. Instead of imitating the developed countries we should see what is more beneficial for an under developed country like India.

As Edith Tiltor Penrose in her book *The Economics of the International Patent System* points out "No amount of talk about the economic unity of the world can hide the fact that some countries with little export trade in industrial goods and few if any inventions for sale, have nothing to gain from granting patents on inventions worked and patented abroad except the avoidance of unpleasant foreign retaliation in other directions." She wisely suggested "In view of the general desirability of facilitating the economic development of 'Backward' areas it would be good policy to permit all non-industrial countries freely to use all foreign originated inventions in industries producing for the domestic market.

We would even say that foreign inventors do not need these exploitative patent laws to go on making research. Mr. Edsel Ford of the world famous Ford Motor Company was asked in 1939 in

hearing before the U.S. Temporary National Economic Committee whether inventions would continue if there were no patents, Mr. Ford replied without a moment's hesitation "I feel quite definitely, it will be carried on". Eugene Schinder, managing partner of Crenzot Hugel French Arms Industry once wrote "I am quite of the opinion that there would be very little difference in respect of rapid progress if patents were abolished. With an unrestricted system the progress might commence a little later but the progress would proceed all the faster. The inventing spirit follows his ideas not for gain but driven by an inner compulsion which will not let him rest."

To sum up in the interest of our people there should be no patent law in our country so that Indian Nationals may be free to make full use of what knowledge they have. Japan had no patent law up to World War-II. Now Japan stands in line with U.K. and U.S.A. Also in Italy the absence of patent law for food drugs and chemicals has enabled Italy to make striking progress. If we look to the history of drugs, medicines and other chemicals it would be clear that many European countries which are today highly developed had their patent law only after reaching a certain stage of development. Therefore the only sensible course for us is to abrogate the patent law completely till we develop to a high degree. No threats or pressure from any quarter should deter us from this goal. Only recently the Reserve Bank brought to light the fact that a sum of Rs. 3.86 crores was remitted abroad by 44 pharmaceutical Companies in the form of dividends between the year 1956 to 1965. This is an alarming state of affairs and it must be ended.

When the Bill was discussed clause by clause in the Committee we disagreed on the following clauses with the view taken by majority.

Clause 11(2) concerns the priority dates of claims of a complete specification. In the Notes on clauses at page 91 of the Bill clause 11 says "This clause seeks to make provision respecting the priority date for each claim of a complete specification and is based on section 5 of the U.K. Patents Act 1949, and Sections 44 and 45 of the Australian Patents Act 1952 but its scope is enlarged. . ." This enlargement would create many difficulties and much ambiguity. In U.K. priority dates for individual claims are not required to be indicated. The priority date is required in some cases only and not in all cases. If this clause is read with clause 12 the Controller will refer to the examiner to see whether the priority date is correct or not. The language of clause 12 is uncertain and vague. If we study carefully this clause the Controller will ask the examiner whether it is accord-

ing to the requirements of the Act and whether there is any lawful ground for objection. The word 'lawful' has no meaning. If there is any objection it can be only on legal grounds. In the Civil Procedure Code and the Criminal Procedure Code a plaint or complaint is examined and the grounds or points are specifically mentioned on which the plaint or complaint can be rejected.

Clause 48.—This clause provides that import of medicine or drug or medical equipment by the Government for its own use or the production of a patented article by the Government for its own purpose shall not be regarded as an infringement of patent rights. This gives Government vast powers and no right of appeal to the aggrieved parties is provided in the Bill. We agree that the Government should be empowered to import for its own use or for any Government dispensary but this provision may hamper local industry also. So there should be provision of appeal to High Court or relevant tribunal against the decision or order of the Government. Justice Ayyangar had recommended on page 23 of his report that some compensation might be given to the aggrieved party.

Clause 53.—Regarding the term of patents the Bill provides in this clause that in case of inventions of food medicines the period of the patent should be ten years and in case of other inventions fourteen years. In our opinion this period of patents is not desirable for grounds already mentioned in our general remarks for abrogation of Patent law. The patentee should not be permitted to exploit the consumer for such a long period. Now the conditions have changed. The means of Transport and communications have increased and also the number of qualified doctors is also fast increasing. India is such a big market that within short time the patentee will be sufficiently rewarded. Hence we strongly feel that in case of Drugs and medicines and food the period of patent should be seven years and in other cases it should be 10 years from the date of patent.

Clause 55.—This clause deals with opposition to grant of patents in certain cases. Under this clause the objection would be on the ground that the invention so far claimed in any claim of complete specification was used in India before the priority claim. So far so good. But the explanation provided to this is very detrimental to Indian inventions and beneficial to the foreign importers. The Bill provides for the patent of process only and not of product. But this explanation protects the imported product brought into India before the passing of this Bill. This is highly objectionable and strikes the very spirit of the Bill.

Clause 90.—Under this clause provision is made regarding reasonable requirements of the public deemed not satisfied. This clause is very important. It controls three clauses 84, 86 and 89 and further explains what are reasonable requirements, of the public. "If the Government wishes the foreign patentee to come and work his patent but the latter is reluctant to do so, the Government can either use the method of compulsory working or methods of compulsory licensing". (Para 263 of the Role of Patents in the Transfer of Technology to Developing Countries—Report of the Secretary General United Nations). The real issue at present in our country revolves round the position of foreign patentee. "The foreign patentees in our country are mostly exploiting our poor consumers by artificially raising prices and creating monopoly of patented articles. In revoking licences of such firms there should be no "Ifs and Buts". Hence this clause should begin with the following words "If the patentee fails to manufacture in India and supply the same on reasonable terms" etc. their patents are liable for revocation. The danger of keeping clause as it is, is that the defaulting patentee is likely to take advantage of the words "by reason of the default of the patentee" and would try to show by hair-splitting of words that there is no default on his part but that the reason of default lies in the laws of other countries in which he manufactures. We also wanted to add a new clause to the Bill and moved the amendment to the effect that a tribunal like the tribunal under Income Tax Law may be provided but we were unable to carry out our amendment. Our suggestion is that the Central Government may be notification in the Official Gazette constitute a Tribunal consisting of as many members as it deems fit. The Members of the Tribunal shall be persons who have in the opinion of the Central Government adequate knowledge and experience of (a) Law (b) Accountancy (c) Administration (d) Knowledge of Company Law. Among the personnel there should be a Judge of the High Court. The first court of Appeal should be Tribunal and the decision of the Tribunal could be made appealable to the High Court.

Clause 116.—This clause as passed by the Committee bolts the doors of the High Court in respect of certain orders issued by the Government or by the Controller. This is undemocratic. The word in this clause "no" should be deleted and the wording of this should be that an appeal shall lie to the High Court from any decision, order or directive issued under this act by the Central Government and to the Tribunal from any act or order or decision or directive made under this Act by the Controller.

Above are the main clauses on which we are not in agreement with the majority view of the Committee. Regarding provision

of licenses of right and compulsory licenses we are definitely of the view that in the existing situation of monopoly prices of drugs and medicines and food, the provision of compulsory licensing and licences of right is no remedy at all. It is only a haphazard, ineffective, and inadequate which will prove powerless to root out the menace of these foreign importers ransacking our country on the strength of our patent laws, draining away our foreign exchange earnings. If the Government want that there should be quicker industrial progress then our suggestion are:

- (1) As India is in the early stages of industrial development we should abrogate the patent law for some short period and watch the results for our industry;
- (2) Anybody should be allowed to start manufacturing of a product on payment of royalty. This will increase the number of manufacturers and the patentee will be benefited by receipt of royalty;
- (3) If there is dispute about infringement such cases should be decided within 12 months;
- (4) All foreign firms should be compelled to manufacture a product in India from beginning to end with major portion of Indian Capital and using as far as possible indigenous raw-material.

Then and then only India would progress in research, the scientists will get incentive, the poor consumers would get medicines at fair price and our nation will be spared of the needless drain of foreign-exchange.

NEW DELHI;
October 31, 1966.

RAMCHANDRA VITHAL BADE,
VIMALKUMAR M. CHORDIA.

II

We regret to find ourselves in disagreement with the majority of our colleagues in the Joint Select Committee on the Patents Bill.

It has been the practice in all countries for over a century to confer proprietary rights upon the inventor by law and to limit in certain respects what is absolutely necessary in the public interest without allowing those rights to be eroded by various types of exceptions.

The justification for conferring these rights by way of letters patent has been that inventions involve huge expenditure and, therefore, unless the inventor can see some reward, such expenditure will not be undertaken. The inventor incurs a financial risk, namely, to make it worth while for a concern or a company not only to incur expenditure on research but also to bring the invented product to the stage of commercial utility. Only if the inventor is granted by way of a proprietary right a certain period of exclusivity to exploit the patent will he undertake this risk. Only at the end of this comes the recompense or the reward to the inventor and to those who take up the invention for industrial exploitation.

Out of numerous items that are undertaken for research only a few are patented. Many of them are abandoned because their commercial exploitation is not economically feasible. It follows, therefore, that the cost of an invention which is eventually a commercial success is very high indeed and, therefore, the social and economic justification for granting patents for such inventions is abundantly clear.

We are at a loss to understand how one could hold the view that the existence of a strong patent law in underdeveloped countries discourages scientific research and development. In fact, in the United States, the faster rate of industrial and scientific development in relation to industry and applied science occurred as a result of a strong patent law. The free exchange of patents has done immense good to most countries and has resulted in a rapid rate of growth internationally in the field of industrial, scientific and technical development.

Unfortunately, there is a kind of schizophrenia to be found in regard to the granting of adequate patent protection for inventions. On the one hand, many people want scientific and industrial development; on the other hand, they get obsessed with all kinds of claptrap about monopoly, pricing, social justice and making medicines and drugs available cheaply to everybody all over the country. Yet they know, as we all know, that a strong patent law has resulted in the greatest advance in the manufacture of medicines, drugs and foods.

We are at a stage at which we want industries to apply their maximum resources to research and development but, if the Bill is passed in its present form, this purpose will not be achieved. We are of the opinion that the main purpose of the Bill, which is to stimulate inventions amongst the citizens of India and to encourage research and development for industrial and technological progress,

will not be served if the Bill is passed in the form in which it has been reported by the Committee. We feel that the Bill will not create a proper investment climate in India for the rapid growth of the industry, whether by Indian entrepreneurs or by import, where necessary, of foreign technology and investment.

A number of provisions of the Bill and in particular clauses 2 (h), 3 (d), 8, 48, 53, 87, 88, 93 (3), 95 (3), 99, 100 and 102 strike at some of the foundations of widely accepted principles in this field. In our view the basic validity of patents and their advantages are almost universally accepted and any restrictions on such rights should be governed by the principles that apply in regard to exproprietary legislation. This is in order to ensure that such measures are only taken in exceptional and clearly defined circumstances, that there is provision for full compensation and that the right of appeal to the courts of law is guaranteed. It appears to us that several parts of the present Bill run counter to these principles, tend to violate the legitimate rights of the patentee and do disservice to the general economic advancement of the country.

One issue on which we feel constrained to part company with the majority of our colleagues is that we see no justification for differentiating between various industries. There does not appear to us to be any reason for discrimination between inventions in different fields of production or enterprise. Since it is generally agreed that patent protection advances progress, we fail to understand why an important need of the consumer such as drugs and medicines should be denied the advantage of such protection and promotion.

We see no reason whatsoever why the term of sixteen years for all patents to be found in the existing law should be shortened. On the contrary, the world trend is in the opposite direction of prolonging the life of patents and, in the light of this, we are not prepared to accept any term shorter than sixteen years as the period of validity of all patents in all fields. This, in our view, should be without prejudice to the normal provisions to be found in the current Act in regard to a further extension of time in cases where the patent has not been found sufficiently remunerative.

We do not deny that there is room for carefully devised restrictions on property in patents in order to guard against a situation where an unrestricted operation of patents might, on balance, result in serious damage to the vital public interest. There is need to guard, however, against throwing the baby out with the bath water by a ready resort to measures of a kind which would deprive a whole category of patentees of their rights. What, in our view, is called for is

a process where there is an examination of each case on its merits and a careful demarcation of the limits of intermerence and of adequate compensation for the damage suffered by the patentee.

We have carefully examined the provisions of the Bill in the light of the evidence recorded, the weight of which undoubtedly was in favour of strong patent protection. In order to bring the Bill in line with the trend of expert evidence and the universally accepted principles referred to above, some clauses would require deletion while many others require substantial modification. Unless this is done, we are of the view that the Bill as reported by the Committee should not be enacted.

NEW DELHI;
October 31, 1966.

M. R. MASANI
DAHYABHAI V. PATEL

III

Although the Joint Committee have done their best to submit their Report as expeditiously as possible, I am not sure as to whether there will be time for the present Parliament to give its consideration and pass the Bill as reported by the Joint Committee, if it is treated in a routine manner. On the other hand, it is my feeling that this Bill is of great importance and time should be found to pass it in the winter Session of Parliament. Should for any reason this is not possible, I would earnestly urge that the new Parliament, after the general elections, should give this Bill highest priority.

I am confining my remarks in the following paragraphs to only a few important provisions of the Bill and I feel that such suggestions as I have to offer are necessary in the present stage of development of the Patent Law. These suggestions are in line with the main purpose of the Bill which is to stimulate inventions among citizens of India and to encourage development and exploitation of new inventions for industrial progress in the country and the flow of technology from abroad into India. I also wish to emphasise that our legislation must help achieve increased production, and such increased production would be possible only by stimulating investment and greater use of technology, both foreign and Indian.

Clause 48:

This clause allows the Central Government to use a patented invention and/or to import a product covered by a patent without such use or importation constituting an infringement of the patent and without making any provision for payment of compensation to the

patentee. The provision thus grants unlimited powers to Government. It will enable the import of pirated goods in circumstances of grossly unfair competition with the home industry. In the field of drugs, I fear that the loss of patent production over a wide field by placing the Government in a privileged position is objectionable. Indiscriminate import of drugs and medicines will completely dislocate the indigenous industry. It will cut into the rights of the patentee and also obliterate one of the purposes of the patent and the licencing provisions namely, to encourage the home industry. Further our foreign exchange situation being what it is, one has to be eternally vigilant about the use of our meagre resources. I, therefore, feel strongly that in such cases of use or importation, Government should in fairness compensate the patentee for any loss he may incur in this behalf.

Clause 53:

This clause provides that for inventions claiming a process for the manufacture of food, medicines and drugs, the term of a patent shall be ten years from the date of the patent and in respect of other clauses of inventions, the term shall be fourteen years from the date of the patent. The present Act provides for a term of sixteen years for all patents and also that the term can be extended by a further period of five years and in exceptional cases even to ten years, if the Government is satisfied that the patentee has not been sufficiently remunerated. The proposal to reduce the term of a patent to ten years in the case of patents relating to drugs and medicines is not realistic because the holder of a patent cannot derive benefit from the invention during a substantial portion of the term. When a new product is produced and patented, between the date of application for the patent and the introduction of the product in the Indian market, there is very considerable time lag because further tests, research and studies will be necessary to evaluate its efficiency, utility and adverse effects, if any. Clinical trials and tests are very difficult to carry out and the facilities are also very meagre. Considerable time elapses between the discovery of a product and its availability in the Indian market. Specific data in this behalf was furnished before the Joint Committee. The term of a patent should be such as to enable the inventor to obtain a reasonable return for the expenses incurred by him on research, tests, clinical trials and commercial development. A relatively long term is justified in the case of developing countries. Mr. Justice Ayyangar had recommended that the term of every patent shall be sixteen years from the date of the patent. I feel that wherever a patentee is able to make out a case that his patent has not

been sufficiently remunerative, there must be a provision for extending the term of the patent by two periods of three years each.

Clauses 86 and 87:

Clauses 86 and 87 deal with the endorsement of a patent with the words "Licences of right". In the case of patents other than those in respect of food, medicines or drugs as well as methods or processes for the manufacture or production of chemical substances, it is only after the expiry of three years from the date of the sealing of a patent that the Central Government can make an application to the Controller for endorsement of the patent with the words 'Licences of right', on the ground that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price. In the case, however, of patents relating to food, medicines or drugs as well as methods or processes for the manufacture or production of chemical substances including alloys, optical glass, semi conductors, intermetallic compounds at present in force and patents which may be granted under the new Act, in respect of any such invention as is referred to in section 5, the patents are deemed to be endorsed with the words 'Licences of right' from the commencement of the Act in the former case and from the date of sealing of the patent in the latter case. There is, therefore, discrimination and the period of three years which is to lapse before Government can apply for the endorsement of a patent with the words 'Licences of right' has been done away with in the case of inventions relating to food, medicines or drugs and the processes for the manufacture or production of chemical substances. A patent is aimed at safeguarding the interest of the inventor against the unjustified encroachment of his rights by third persons. In the case of 'Licences of right', the advantages accrue neither to the Government nor to the general public nor to the inventor, but only to third parties, who will be enabled to make unjustified profits, though they have not contributed towards the costs of research and industrial development. Once the short period of a patent protection ends, the subject matter of the invention becomes common property. If licences are issued indiscriminately and as a matter of right to several applicants, no one will be willing to invest and risk capital in working the invention. I feel that the discrimination pointed out above should be done away with and as in the case of other inventions, inventions relating to food, medicines or drugs and the processes for the manufacture and production of chemical substances should be liable to endorsement with

the words 'Licences of right' on an application by the Central Government, only after an initial period of three years from the date of sealing of the respective patents.

Clause 88:

This clause deals with the effect of a patent being endorsed with the words 'Licences of right' under sub-clause (5) in respect of patents in the field of food, medicines or drugs. It also provides that the royalty and other remuneration payable under a licence shall not exceed 4 per cent of the net ex-factory sale price in bulk of the patented article exclusive of taxes and commissions determined in the prescribed manner. Under the present Act, royalty is to be determined by the Controller who is directed to secure that food and medicines shall be available to the public at the lowest price consistent with the patentee's deriving reasonable advantage from the patent rights. Mr. Justice Ayyangar has also stated in his Report that it is not feasible to arrive at a uniform rate of royalty which would be reasonable for licences in respect of each and every invention and that it is not desirable to fix statutorily the maximum rate of allowable royalty. Royalty is intended to cover the expenses of research expenditure involved in the invention and also as a reasonable compensation to the inventor. It is not possible to fix a royalty rate under the law which will reasonably cover all cases. The proposed royalty of 4 per cent in return for the use of valuable patent rights on which vast sums have been expended on research, will not enable the patentee to recover even a part of his outlay, particularly in the pharmaceutical industry which is research oriented, highly competitive and requires very heavy investment in equipment, men and materials. Royalty has to be fixed having regard to the various factors including the nature of the invention and the expenditure incurred by the patentee in making the invention and developing it. In order that invention in the fields mentioned, may be stimulated amongst Indians, I feel that royalty should be determined by the parties in each case and regulated by the Controller.

NEW DELHI;

BABUBHAI M. CHINAI

October 31, 1966.

IV

In spite of the bulky evidence produced and the time consumed by the Joint Select Committee and in spite of strenuous efforts of

Members of the Committee, the Bill as it has emerged shows a very confused attitude on the part of the majority in the Committee towards the mass of evidence which had suggested specific changes in regard to very important clauses, such of them, as related to period of patents, compulsory licence, licence of rights, rate of royalty and powers of Government to use patent etc. The witnesses opposed the provisions of certain clauses, such as clauses 48, 53, 84, 85, 86, 87 and 88, in regard to which I shall deal in detail later on. However, there was unanimity between all the witnesses and the Members of the Joint Select Committee on clauses regarding appeals. Accordingly these clauses have been amended to provide for appeals to High-Court instead of to the Central Government. This is a welcome change brought about by the Committee. Certain other minor changes are also welcome.

An initial mistake has been committed by the Government, which has created more confusion and has resulted in stress having been laid on patents for food, drugs and medicines, while patents for machinery and other articles, have in importance, gone into the background. When Government as a policy measure, had decided to differentiate between one category of articles and others in respect of period, compulsory licence, licences of right and royalties etc., the proper course would have been to bring forward two separate Bills for them. This means there should have been one Bill for foods, drugs and medicines and the other for machinery and such other articles. May be that both could have been entrusted to one and the same Joint Select Committee. This I write on the strength of evidence that has come forward and importance given to drugs and medicines by all concerned. In my opinion if a separate Bill for machinery etc. would have been there, evidence of quite a different nature and in a fairly good amount, if not equal to that produced by the drugs industry, would have come forward. Excepting one or two witnesses from Ahmedabad, nobody else came forward to give adequate evidence in respect of textile and other machinery. Whatever information could be gathered from those witnesses it has led me to the conclusion that we have not been fair to those industries, whose patent period is fixed for 14 years. It may be argued that invitation for giving evidence before the Joint Committee was equally extended to those industries also; but the psychological atmosphere created had proved otherwise and hence my contention and argument should hold good. In the absence of sufficient evidence not having come forth, one may be inclined to believe that every-thing provided in the Bill suited those industries. At a later stage, it may come to be realised that this was not so.

I now come to the subject of patents relating to drugs, medicines and food. Ours is a developing country and as such our patents policy in respect of these should be governed by the following factors:

- A. It should encourage research and inventions within the country.
- B. It should stimulate a speedy growth of the patented drugs and medicines in the country both in the public and private sectors together with the growth in respect of un-patented medicines or of those whose patents have lapsed.
- C. The standard of quality of the drugs and medicines be strictly maintained and availability of these be made easy and at reasonable prices.

In what manner the Patents Law of the country be formulated, keeping in view a period of next 20 or 25 years before us, to attain the above mentioned objective with due incentive to the industry, must be the concern and responsibility of all well-wishers of the country. To attain these objectives, I believe, the following steps are necessary:—

1. To create conditions and take steps where by Research Institutes may be speedily developed on a large scale both in the private and public sectors.
2. To create conditions whereby foreign collaboration with know-how and patents crystallised on research carried in outside countries, be encouraged to come in on a fairly large scale, keeping in view the country's best interests in regard to availability of useful drugs and medicines with due incentive to the collaborators and patentees.
3. To create conditions for proper rewarding of our scientists.

From my point of view, the above quoted conditions can be created in the following ways:—

1. The period for patents based on research done within the country and of those which are outcome of outside research needs to be different. It should be longer in case of Indian research based patents, may be whether such patents are a result of research in public sector or private sector, with or without foreign collaboration. While determining the period of patent following main factors need to be taken into account:—

A. In how much time the industry is expected to be developed as research-based industry, and develop to a stage where research expenditure can be expected to become part and parcel of the regular industrial production.

B. In public sector industry or in Government Research Institutes, research is to be confined to laboratory and pilot plant stage or it is to be taken up for full commercial exploitation mainly on its own and commercial exploitation is to be or not to be handed over to any third party as holders of licences of rights. The same should apply to private-sector which may run its own research institutes on the same footing as those of public sector. India is far more backward in research establishment and can be expected to reach a competitive standard in this respect in next 20 or 25 years. Period of Patent should therefore be fixed keeping in view this main factor.

C. In case of patents, based on foreign research, the period should be judged and fixed having in view not the research expenditure side, as it forms part and parcel of a highly organised industry outside this country, but on the factors such as capital investment, period required to put through the drugs in the market, after it has passed through formalities of clinical tests etc. and expected return on capital after the drug is put in the market, as also the extent which the drug is expected to be kept in use. The period should be sufficient to give a patentee place of operation in the market for atleast five years after the drug having been introduced in the market.

Keeping in view all the above considerations, I am of the emphatic view that if patents are a result of research within the country, the period of ten years from the date of patent is insufficient, and to remedy this there should be a right of renewal for another four years after the ten year period is over.

2. As for other patents, whose inventions have been done outside the country, but which are granted for exploitation within our country ten years period is reasonably sufficient, as the main consideration is to put the drugs on economic footing in the market and this can be accomplished within this period. However, to accomplish all this, it is very essential that the industry in all its aspects is fully run by the patentees. But Government seems to have no faith in this way of running the industry. So also the majority view of the Committee seems to have developed the idea not to differentiate between the two types of patents as explained above, but to try to treat a lower period of patents as in the best interests of the people.

The majority view has not remained satisfied mainly confining to the question of period, but they have maintained in their original forms clauses 87 & 89 of the Bill, which not only cut at the very root of the base of the Patent Law theory, but will from its very inception reduce the patentee (whether in public or private sector), to a mere agent of the holder of licences of rights created by clause 87 and that too according to clause 88 on a mere payment of royalty (never exceeding 4 per cent of bulk sales) to the patentee. The matter does not end here and in the case of patents granted before the commencement of this Act this clause shall be applicable, from the date of commencement of the Act, while on future patents it shall be applicable from the date of sealing of the patent. It is further put in that the Controller has not to go into the financial and technical capability of the applicant for licences of rights.

To me it is very clear that the majority view of the Committee Members has not been able to realise the serious consequences of clauses 87 & 88 as put in the Bill. When one goes a little deeper into the matter, one comes to the following conclusions:—

(1) That if these clauses are accepted as they are, our public sector research based patents will never be possible to be worked on a commercial scale on their own within the country. The example of Pimpri is there. The invention of Hamycine will not be able to be worked by them independently even for the shortest period after this Bill is passed into an Act. According to clause 87, any person can get a licence of right, on a royalty, which will be less than 4 per cent, payable to the Hindustan Antibiotics. Further their negotiations with America and other countries, by which they expect to get 7 per cent royalty from them is going to get serious set back. This means that the research based industry will merely work as invention agent of holders of licences of rights, and under circumstances the scientists and other staff employed will not have fair chance of becoming adequately experienced and rewarded.

(2) No foreign collaborator will come forward to start research-based drug industry in the Country as he is not expected to risk huge amounts for such holders of licences of rights who will reduce the foreigner as mere collector of royalties on his research.

(3) Foreign patent holders, will not be coming forth enthusiastically for patents, which are results of inventions done outside India, as they have been upto now, for securing patents for drugs which require huge investments, as from the very day of sealing of the

patent, they will be exposed to become mere agents of the holders of licences of right, and as such they will not be able to make any reasonable earning by entering into the market on their own. Their faith in Government which is very essential in matters of patents, as they are a reciprocal entity, will be badly shaken as the clauses as they are will affect old patents also. In this respect the Government has been so careless as not even to bring forth an explanatory note giving grounds on the basis of which they can justify such application on old patents. Unless it is proved that there are a very large number of patents the product of which is in heavy demand and there are persons capable of becoming holders of licences of rights possessing required know-how, putting in of such a clause will be grossly detrimental to the interests of the growth of the industry.

As a result of all this only such patents will be taken in future, the products of which may be expected to be produced with medium-sized capital investment and with easy marketing possibilities. Such patentees will be on the look out for an applicant of licences of rights who can along with royalty pay for know-how and on getting a good amount for this will not care to put the products from their own factories into the market. Under such conditions our country will have a set back and may remain a third rate country in the production of medicines.

(4) As licences of rights can be granted from the date of sealing of the patent, on practical grounds no applicant can come forward unless he has stolen the know-how while the patent was in process of being granted and he is fully in know of the process and its possibilities. The Controller too will be faced with serious difficulties. The assessment for possible sale of the drugs cannot be made unless it is put in the market for some time. As such no data will be available to the Controller regarding the parties on the basis of which rates of royalties can be fixed. The financial and technical capacity cannot be questioned by the Controller and as such this may result in creating other problems of malpractices etc.

Having all these factors in view, the only remedy is to amend clauses 87 & 88 suitably. In my opinion clause 87 should be amended as follows:—

A. It should not be applicable to old patents.

B. In case of new patents it should not apply to patents, which are result of research carried out in any research institute in India, otherwise we will never be able to put our research on sound footing.

C. In case of other patents, the right should not accrue from the date of sealing of the patent but after three years from the date of sealing of the patent only as within this period everything will be clear to all parties concerned.

As for royalty the rate should be a maximum of 6 per cent and not 4 per cent as envisaged in the Bill. The reasons are that in certain cases there may be necessity for giving higher rates. It should also be borne in mind that holder of licences of right is a sort of a middle man with no risk or little risk while the patentee bears all initial risks. As a matter of fact more protection is needed to be given to such patentees. Giving more benefits to a middleman than to the originator has never been heard of. It is also totally forgotten that scientist is the backbone of the original patentee and his chances of being rewarded adequately will go down if the concern wherein he works is reduced merely to a royalty collecting concern from the very day the patent is sealed and that too at a low rate of always less than 4 per cent.

There is another clause 48, which should either be deleted or suitably amended. Sub-clauses (a) (b) (c) of this clause empower the Government to make use of patents for their own purposes without compensation. This may be applicable in case of emergency such as declaration of war or epidemics but not otherwise. When our future policy is for expansion of public sector, whose products we can always use in such situations and when for outside invented patents we are providing for production by holders of licences of rights, even in an emergency such a step is not expected to be required. The clause as it stands will only scare away the patentees with no real benefit to the Government.

Evidence had also been forthcoming for abrogation of patents in case of foods, drugs and medicines. But the plea put forward was mainly that prices will go down and there will be increased availability of drugs. But abrogation under present conditions can only lead to production of sub-standard drugs endangering the health of the people. As a matter of fact to relate prices of drugs with patents is a very wrong notion. Prices have very little to do with patents. Unpatented standard quality drugs fetch more prices than even patented or low quality unpatented drugs. The example of Sandoz Ltd., is there. They produce no patented drugs. Even their distilled water is of such high standard that it is taken for Defence requirements at higher prices. About 80 per cent of drugs produced in the country are unpatented or those whose patents have lapsed. Therefore prices have nothing to do with patents. Hence abrogation on this ground is

un-called for and will lead to malpractices and deterioration. Abrogation can be proper only when highly developed research institutes come up and develop in the country on a fairly large scale. In that case research Institutes can mainly be taking the inventions upto Pilot Projects and then hand over to large and medium sized, or small size institutions or firms as the case may be for commercial exploitation such enterprises will be free from research expenditure side of it and can be made to work as other industries work. But such conditions are not there in the country at present and are not expected to be in the near future.

A section of the evidence had pleaded for a seven year patent only. As a matter of fact they were those who actually pleaded for abrogation in one breath and for seven years period in the other. They also pleaded for licences of rights from the very date of sealing even when the period is only seven years. If their view is accepted it will clearly amount to total negation of patent in the name of patent. The net result of it will be reversing the entire process of growth of the industry. Members of the Committee who agreed with such a view for seven years probably did so without going into the economics of working of patents. Similarly foreign evidence pleaded for 16 to 20 years period for patents, which if accepted will create foreign monopolies, retarding growth and research in this country. Such a view is not suitable for a developing country like ours.

I now sum up my case as follows:—

Clauses 53, 87 & 88 as they stand at present are very detrimental to the growth of the drug industry in the country. The net result of these will be that research will be out of question in the private industry while research based public sector will work merely as invention agents for holders of licences of right. For outside patents progress will be confined to medium sized industries with very slow growth. To put things right my above quoted suggestions are summed up as follows:—

1. Indian research based patents must be for ten years from the date of patent with further right of renewal for another four years.

2. Patents for outside inventions and applied for working within India, should have a period of ten years only.

3. There should be no licence of right in case of Indian research-based patents. The patentee should be allowed to work it fully for the whole period of the patent.

4. In case of other patents licence of right should start only after three years from the date of sealing of such patents.

5. Royalty payable should be upto 6 per cent in place of 4 per cent.

6. The Controller should have the power to enquire into the financial and technical capacity of applicant for licences of rights with power to refuse in case these are not found suitable. There should be set rules for guiding the controller in this respect.

7. Clause 48 (a) (b) & (c) should be applicable in case of emergencies like war and epidemics. In other cases compensation should be paid to patentee.

All the above suggestions from (1) to (7) require amendments of clauses 48, 53, 87 & 88.

I had moved amendments more or less on the above lines, but these were not accepted. I, however, would have been badly failing in my duties if I had not brought forward all my objections views and suggestions in the form of this note of dissent. My proposals are aimed at development of the drug industry in the best interests of the people, without injuring the interests of the patentees and thereby safeguarding the required growth essential for the country. It should be viewed from this angle only. A very important factor which should also not be ignored and should be given very heavy weight for consideration is that our Bill provides for process patents and products out of the patented process only are protected. Therefore even when a patent is for ten years with right of renewal for four years in case of research-based industries and merely ten years in other cases, there are always possibilities for holders of such patents to face competition in case a new process is evolved to produce same type of products in another way. Thus the monopoly period, which is always disturbed by endorsing patent with licences of rights, will further be liable to be facing competition in other ways. As such proper safeguards as suggested by me are all the more essential to place the industry on sound but reasonably competitive lines with due safeguards for research possibilities etc. for a coming period of 20 to 25 years. This cannot be accomplished by passing the Bill in its present form particularly in regard to clauses 48, 53, 87 and 88 of the Bill.

NEW DELHI;
October 31, 1966.

KASHI RAM GUPTA.

V

The law relating to patents has been in force in India for a very long period. But so far it has not achieved its main purpose of stimulating inventions among Indians and encouraging the development and exploitation of new inventions for industrial progress in

this country. On the other hand the patent law in India has only afforded protection for foreigners for establishing monopoly right for selling their products at fancy prices in India. If the total number of patents granted in India since the introduction of this law is considered it will be found, that more than 90 per cent were granted to foreigners. In advanced countries, the position is quite the reverse; foreigners hold only a small percentage of the patents granted.

According to knowledgeable sources, the need for, as well as the aims and achievements of any law in any country, are decided by the social and economic conditions prevailing and the collective needs of the people therein. For the patent law to be advantageous to a country, there are three basic requisites:—

- (a) the level of scientific and technological research should be such that inventions beneficial to the people can flow freely;
- (b) the technological potential as well as current industrial activity should offer ample scope for developing the inventions into large scale production of goods; and
- (c) the general economic and social conditions prevailing should be able to provide means for initiating new industries and assure a popular demand for the goods produced.

The countries in which the above three conditions do not exist to the full extent are usually classed as “backward” or “under-developed” and the patent law usually work to the disadvantage of such countries.

It has been pointed out by many that countries like Italy, Japan and USSR after long period of experiment without patent law, had to enact or are enacting patent laws in their respective countries. These gentlemen only forget to mention that, these countries after freely using and copying the advanced scientific knowledge and technical know-how, without any hindrance of patent rights, have reached a stage where they are in a position to offer many inventions of their own to the world at large. And it is to obtain a price for their inventions that they have enacted or enacting Patent laws.

It will take some more years for India to reach that scientific and technological level to stand comparison or offer competition with other advanced countries. It is our considered view that freedom from Patent restrictions, and the facility to use all known processes and know-how and to make all known products through various

other process, will accelerate the development of India into an advanced country.

Even in America, the extensive development of chemical industries date from the time, when, during World War I, the United States Government confiscated the German patents and allowed American manufacturers to use them.

In the conditions obtaining in India today, it is in our best interest, to take advantage of the collective experiences of the advanced countries, modifying them to suit our local conditions. In this effort, the patent law will only offer effective brakes and hence the necessity of doing away with patent law altogether. May be, after a decade or two, it may become necessary for us to enact a patent law; but not now.

The argument that patent protection affords incentive for individual inventors is rather old and does not hold water in the modern world. Modern scientists work in laboratories owned by large corporations or by State and every invention is the result of the labourers of a team or group. In India especially, all the fundamental research work is done in centres owned or financed by the government. So the question of compensating the individual inventor does not arise at all.

Having failed in this prime objective, it was still open to us to provide that life saving drugs, foods and beverages, pesticides and insecticides, be made non-patentable. The Bill fails in this respect also.

The drug prices in India are in many cases, the highest in the world while the living standard of the people is the lowest; as was established by the American Senate Inquiry headed by Senator Kefauver. While trying to develop our own drug industry, we could have imported drugs from wherever we can get them at the cheapest rate and made them available to our people. And our own industry also would develop unhindered by foreign patent monopolies.

In India we are in the grip of a permanent food crisis. We import large quantities of food from America at the cost of hard earned foreign exchange and much self respect. Development of agriculture is therefore an urgent necessity. In view of this pesticides and insecticides also should have been made non-patentable, so that they are available at cheap rates to the producers of our food crops.

In these days when preparations like Ovaltine, Horlicks are used by all people irrespective of whether they are babies or invalids or

old, food or beverages as a whole should have been taken out of the pale of patent law.

Although clause 5 stipulates that "the patent shall be granted only in respect of claims for the method or process of manufacture and in respect of claims for the substances when produced by such methods or process", yet in Clause 107 (2), it is stated that "any substance of the Chemical composition or constitution as the first mentioned substance shall be presumed, unless the contrary is proved, to have been made by the aforesaid patented method or process." Thus clause 107 almost concedes patent protection for substance and defeats one of the main objects of the Bill by putting the onus on the defendant to prove that his process is different.

The term of patents has been provided as ten years from the date of patent for drugs or food and 14 years for other inventions.

The term of 10 years for drugs is too long. In modern times, many a new drug becomes obsolete within three or four years and as patented drugs are sold at 17 to 20 times the cost of production, the period of 10 years is too long for drugs. This should be reduced at least to 7 years in the case of drugs and 10 years in the case of other inventions. The provision regarding the existing patents are also excessive.

Royalty payable to the original patentee in case when a license is granted for the use of patent should not, it is provided, exceed four percent. The tendency in our country is to make the ceiling rate the minimum. Hence the ceiling rate should be only 2 per cent.

More than 90 per cent of our patents are held by foreigners, and this royalty and other charges will be a huge drain on our foreign exchange.

According to Reserve Bank of India Bulletin (November, 1964) the foreign firms had since 1958 invested Rs. 5 crores and had by 1964 already taken out of the country Rs. 4.9 crores in foreign exchange in the form of royalties, charges of technical aid and profits.

Most of the leading scientists who are working in our national institutes have expressed views that are similar or very near to those expressed above. But our government has been influenced more by the views of foreign monopolies and their Indian collaborators than by those of people who are interested in genuine development of our national industry. This is the tragic situation today.

NEW DELHI;
October 31, 1966.

P. K. KUMARAN.
K. K. WARIOR.
DINEN BHATTACHARYA.

VI

While appreciating that the Joint Select Committee had made some very valuable improvements in the Patents Bill, 1965, we regret we still have to record our minute of dissent and to recommend further amendments in the Bill incorporating certain fundamental changes. Before we refer to the specific clauses of the Bill on which we differ from the decisions of the Committee, we would like to deal with certain fundamental concepts of the patents system.

Patents are statutory grants which, in return for the disclosures of an invention, confer on the inventor for a limited time the exclusive privileges of working an invention and selling the invented product. The theory on which the patent system is based is that the opportunity of acquiring exclusive rights in an invention stimulates research and technical progress. Further it induces an inventor to disclose his discoveries instead of keeping them as a trade secret and offers a regard for the expense of developing inventions to the stage at which they are commercially practicable. Lastly, it provides an inducement to invest capital in new lines of production. The history of industrial development seems, on the whole, to have justified this theory. Patents are not created in the interests of the inventor but in the interest of the national economy.

It has been well established that patents are a form of industrial and intellectual property. Therefore, a grantee of a patent must be secured the enjoyment of his patent rights subject to reasonable restrictions. If his rights are expropriated, such expropriation must be done only in the public interest and must be subject to the patentee being granted adequate compensation.

It is recognised that there is need for a more comprehensive law due to changes in economic conditions within the country and the development of technology and patent laws throughout the world. However, the main purpose of the Bill, which is to stimulate inventions amongst citizens of India and to encourage development and exploitation of new inventions for industrial progress in the country and the flow of technology from abroad into India is not likely to be achieved if the Bill is passed in the form in which it has been reported by the majority decision of the Committee.

We have examined all the evidence, which has been recorded before the Committee, of industry organisations and experts, both legal and technical, from India and abroad. The field of activity most affected by this Bill is the pharmaceutical industry, and to a certain extent, the chemical industry. It is on record that the pharmaceutical industry has developed according to the targets laid down

in the Third Five Year Plan and it has programmes of expansion in the Fourth Five Year Plan. We apprehend that the growth of this industry, particularly the inflow of foreign capital and technology, will be adversely affected unless some of the provisions of the Bill are deleted or suitably amended. We also feel that the development of research, particularly basic research in the industry, is also likely to be adversely affected.

It has been urged that the prices of pharmaceutical products are very high in India and it has been suggested that the patents system is responsible for it. After hearing the evidence we feel that it would not be correct to say that the patent system is responsible for the alleged high prices or high costs of pharmaceuticals in India. In fact, the industry organisations as also foreign experts have submitted statements before the Committee which have proved conclusively that the prices of drugs and pharmaceuticals are lower in India than in many other countries and those statements have not been controverted. There are various other contributory factors which have to be taken into account in ascertaining the costs of drugs and the prices. These factors have also been brought out in the evidence on record and in particular in the Report of the Development Council for Drugs and Pharmaceuticals 1962-63. In any case, we feel that the Government has enough powers to examine the cost structure and fix prices of drugs under various other existing statutes. The argument that the patent system gives rise to monopolies which enable the patentee to charge high prices has been taken care of under the Compulsory Licensing provisions (*viz.* clause 84) and the powers taken by the Government to make use of patented inventions as per Clause 99 and 100 of the Bill.

We wish to emphasise that our ultimate purpose is and should be to achieve increased production and that the Patent Law should be such as to be conducive to increased production, inflow of technology, increased national wealth and inventive ability and not to create a situation which retards development. For increased production, there is no getting away from the fact that we shall continue to need for some time inflow of foreign know-how, technology and investment. We cannot afford to deny ourselves the benefit of the rapid developments that are taking place in the advanced countries of the world in every field of industrial activity, including the development of new and life-saving wonder drugs.

The amendments to the Bill which we have suggested will, while creating a proper investment climate in India for the rapid growth of the pharmaceutical and chemical industries, both by Indian entrepreneurs and by import of foreign technology and investment where

necessary, also ensure that no monopolistic tendencies are allowed to be created. We consider that the provisions of the Bill under clauses 48, 53, 87, 88 and 102 should be suitably amended. In the following paragraphs, we are dealing with each of these clauses separately.

Clause 48—Patents not infringed when used by Government:

This clause allows the Central Government to use a patented invention and/or to import a product covered by a patent without such use or importation constituting an infringement of the patent and without making any provision for payment of compensation to the patentee. This clause grants unlimited powers to the Government which, if exercised, will act against the interest of the indigenous industry and is likely to hamper industrial progress and research initiative. It will amount to an expropriation of patents rights and such invasion of the 'Rule of Law' without payment of compensation is objectionable, and places the Government in a privileged position not bound by patents law. It militates against the basic objectives behind the grant of a patent as set out in clause 83, namely, to encourage inventions and the development of indigenous industry. It is particularly undesirable in that it will enable the import of "pirated goods" in circumstances of grossly unfair competition with home industry. Those who are authorised to import under this clause will continue to make big profits even if they are offering the imported products at prices lower than that charged by the inventor because by copying the invention they make use of all the scientific and promotional work of the inventor and do not incur research and development costs of their own and do not take any risks. It is certain that indiscriminate imports of drugs and medicines will in many cases completely dislocate the indigenous industry. It is on record that a recent examination in the United Kingdom has clearly demonstrated that it will open the flood gates to importation of life-saving drugs of doubtful quality and potency.

It should be remembered that the relative provisions of this clause do not find a parallel in the patent laws of any other country in the world.

The point to be considered is that when the Government has the freedom to make use of any patented invention under Clauses 99 and 100 (which will also include importation) retention of this clause seems to be totally redundant. In the U.K. also, the Government has made use of patents by importing patented articles under the relative sections of the U.K. Patents Act, 1949, which are analogous to clauses 99 and 100 of the Bill. Even Justice Ayyangar has not recommended the inclusion of such a clause in his report.

We therefore feel that with the exception of sub-clause (d) of this clause which deals with the use of patent for purpose of experiment or research, sub-clauses (a), (b) and (c) of clause 48 should be deleted.

Clause 53—The term of a patent:

This clause, as reported by the Committee, provides that for inventions claiming a process for the manufacture of food, medicines and drugs, the term of a patent shall be 10 years and in respect of both clauses of the inventions, the term shall be 14 years from the date of filing of the complete specifications. The existing Act provides that the term of all patents shall be 16 years and also that the term of all patents can be extended to a further period of 5 years and in exceptional cases even to 10 years if the Government is satisfied that the patent has not been sufficiently remunerative.

The term of a patent must be looked at from various points of view. It is felt that the period of 10 years is not sufficient either to encourage the inflow of technical know-how or to encourage Indian scientists or entrepreneurs to undertake research, particularly basic research. The climate, it appears, is now ripe for inflow of foreign technical know-how on sufficiently large scale. The 10 years period will be a deterrent to that flow. It is recognised in all quarters that basic research must be encouraged in India. The factors which have to be taken into account are the following:

- (a) Basic Research involves large capital outlays and large recurring expenditure and a long time to develop to fruition.
- (b) The clinical tests and trials in India are very difficult to carry out and the facilities very meagre. Therefore, they take a longer time. Dr. Govindachari has stated in his evidence that they take even 6 to 8 years. This view was supported by Dr. Chipalkatti of the Shri Ram Institute.
- (c) The availability of finance, particularly Indian finance, is difficult and it takes time to attract Indian finance to exploit a patent commercially.
- (d) The time taken for converting the invention from the stage of pilot plant production to commercial production takes a much longer time in India because of many restrictions and also due to non-availability of various resources and facilities.

It is also on record that there is a considerable time-lag between the discovery of a product and its availability in the local market. Specific data in support of this statement has been furnished before the Committee. Hindustan Antibiotics of Poona took several years to discover Hamycin and Dermostatin and to manufacture just a few kilos of the product. There is no technical field where the

time necessary for introducing new inventions is as long as in the pharmaceutical industry and it would therefore, be logical that in this risky and difficult domain the duration of patent should be even longer if not the same as in the field of other classes of invention. The term of a patent should be such as to enable the inventor to obtain a reasonable return for the expenses incurred on research, tests, clinical trials, and commercial development.

Reduction in the term of a patent to 10 years as decided by the Committee will surely put India out of step with the general trend of patent legislation in other countries. It is on record that out of a total number of about 80 countries, only 2 countries (Libya and U.A.R.) make a distinction between different classes of inventions in so far as the term of a patent is concerned. Further, out of 81 countries of the world, which have a patent law, only Libya and U.A.R. provide for a term of 10 years in respect of patents for pharmaceuticals but the patent laws of these two countries have provisions for renewing the term of the patent by a further period of five years.

A relatively longer term of protection is justified in the case of developing countries where the owner of the patent will generally need more time for studying the possibilities of working the patented invention in the country and for making the preparations for its working. If, after these studies and preparations, the remaining term of protection of the patent is short or inadequate for lucrative exploitation, this circumstance might substantially diminish the attractiveness which a patent should have for industrial investment in the country. The general trend throughout the world in respect of the period of a patent is 16 to 18 years. Justice Ayyangar in his report has recommended that the term of patent shall be 16 years and he did not make any distinction in the term of a patent between different classes of inventions.

The proposal to reduce the term of a patent is, in our opinion, unrealistic particularly in the case of drugs and medicines. We feel that the barest minimum period should be such as will give reasonable reward to the inventor. We therefore, strongly recommend that whenever the patentee is able to make out a case that his

patent has not been sufficiently remunerative, the term of a patent should be extended by two periods of two years each.

Lastly, we are of the view that this clause should not be made retrospective in operation. This will affect vested rights. In any case, we feel that such a step is unfair. Companies which have made investments and calculations while considering the 16 years' duration of the patents in question will incur losses if the duration is shortened.

Clause 87 and 88: Licences of Rights—Ceiling on Royalties:

Clause 87 provides that every patent in force as well as every patent granted after the commencement of the Act relating to articles of food and medicines and the processes for their manufacture shall be deemed to be endorsed with the words "Licence of Rights".

Clause 88 provides that where an endorsement "Licence of Rights" has been made, any person who is interested in working the patented invention shall be entitled to do so on application to the Controller. No appeal has been provided for except against the decision of the Controller fixing the terms of the Licence. This clause compels the Controller to grant a licence without taking into consideration the requirements to be fulfilled by the applicant for a compulsory licence under clause 84 as specified in clause 85.

According to the Notes on the Clauses, the changes in the existing law as contemplated in clause 87 and 88 are "intended to secure the proper development of the food, drugs and medicines and chemical industries in the country". We are firmly of the opinion that these purposes will, under no circumstances, be achieved if these clauses are passed as reported by the Committee and we are, therefore, in respectful disagreement with the majority report of the Joint Select Committee for the following reasons:

The enactment of these clauses will very badly affect the growth of production, particularly large-scale production, in the chemical and pharmaceutical fields. There is no justification for these clauses because what the country needs at present is increased production and every effort should be made to encourage such a step. If these clauses are enacted, they will undoubtedly retard production. The result will be that 10 or 20 persons can simultaneously apply for and obtain a compulsory licence as of right. There is no option for the Controller to refuse licences to these persons. This will drive away the entrepreneurs from risking his money and in the

end the country's economy will suffer. Can we afford this in the present state of our economy? The Controller has no authority to look into the technical and financial capacity of the applicant, neither is he obliged to ascertain whether the applicant would obtain an industrial licence under the Industries (Development & Regulation) Act. Indeed, small entrepreneurs could put up small units for which no industrial licences are required.

As we have stated before, the pharmaceutical industry in India has fulfilled the target laid down in the Third Five Year Plan and is expected to fulfill the target laid down in the Fourth Five Year Plan. It is on record that the industry has increased its production of drugs and pharmaceuticals from Rs. 10 crores in 1948 to Rs. 175 crores in 1965. By the end of the Fourth Five Year Plan, the production is expected to rise to Rs. 250 crores. Since 1948, the industry has developed from a processing and formulations enterprise into that of basic manufacture and it is exporting intermediate and finished products from raw materials which are mainly of indigenous origin. The technology employed in the manufacturing processes and research is of the same high standard as applied in other industrially advanced countries.

Perhaps the most striking features of the industry has been its rapidly decreasing dependence on foreign exchange. To sustain a production of Rs. 54 crores in 1958, the industry required foreign exchange of Rs. 9.5 crores representing an import content of approximately 18 per cent. In 1965, while the production had gone up to Rs. 175 crores the import content came down to just about 5 per cent requiring only Rs. 9 crores in foreign exchange. The industry now relies on local resources of supply for 95 per cent of its requirements of raw materials. The products being manufactured in the country cover a wide range including life-saving antibiotics, sulpha drugs, oral antidiabetics, synthetic hormones drugs of vegetable origin and several other products which were formerly imported.

The total investment (equity capital) in 1962 of the units registered with the Directorate General of Technical Development amounted to Rs. 66 crores. This investment has gone up to about Rs. 150 crores in 1965 and by the end of 1970-71 it is expected to increase to Rs. 200 crores. Pharmaceutical exports have risen from Rs. 80 lakhs in 1958-59 to Rs. 2.5 crores per annum today. If, as is to be expected from the figures set out above, the pharmaceutical industry will achieve the plan targets, we do not see any reason why clauses 87 and 88 should be enacted in a manner which

will affect the investment climate, production, indigenous research and above all, the quality of production.

The provisions of the clauses 87 and 88 introduce for the first time in the history of patent legislation a new concept of "Licences of Right" which is unheard of in the history of patent legislation. No country in the world has in its patent law such a provision. Regarding licences of right. Justice Ayyangar was of the opinion that it would be sufficient and desirable that the right to apply for endorsement "Licence of Right" should be restricted only to the Central Government as hitherto. He further observed that as inventions in the fields of drugs and medicines touch public health, it was very necessary that there should be a guarantee that persons who are permitted to work the inventions are those who are qualified to work them honestly and efficiently. We are in respectful agreement with the opinion of Justice Ayyangar.

It is often said that if the licensing provisions contemplated in clauses 87 and 88 are enacted, there will be increased production, greater competition and the prices of medicines will come down. This is totally unwarranted assumption from the economic point of view. If, for example, one person can produce large quantities of a product, he can achieve lower cost of production than if 20 persons are allowed to manufacture the same product each in a small quantity. Besides, it is also doubtful whether the grant of indiscriminate licences of right to several persons in respect of one patented pharmaceutical will result in the manufacture of drugs and medicines of standard quality. The drugs Controller does not have adequate machinery to check the manufacture of sub-standard drugs and it is feared that if Clauses 87 and 88 are enacted, sub-standard drugs of doubtful potency may appear in the market.

Take for example the case of Hamyein discovered by the Hindustan Antibiotics Limited after several years of research and considerable research expenditure. The processes to manufacture these products are patented in India and abroad. If Clauses 87 and 88 as reported by the Committee are enacted, any person in India can apply for a compulsory licence, as of right, under the patents of Hindustan Antibiotics Ltd. Will this not affect the research work of Hindustan Antibiotics Limited adversely? Will they obtain adequate compensation for the entire research expenditure incurred if they are granted the maximum royalty of 4 per cent as proposed in Clause 88? What is more significant to note is that Hindustan Antibiotics Limited has been instructed to negotiate for the exploitation of their patents in other countries with

foreign firms and have demanded royalty of about 7½ per cent—
What is sauce for goose is sauce for the gander.

Since 1965, the country has passed through an economic crisis, the major indicator of which has been the rising trend of prices. The official index of wholesale prices computed by the Economic Advisor shows a rise of nearly 50 per cent between 1963 and 1964. The pharmaceutical industry has been successful in holding the price line during these years.

Clauses 87 and 88, if enacted will erode industrial property rights and strike directly and crucially at the industry and its capacity and incentive for the discovery of new and improved medicines. They will adversely affect firms with expensive research laboratories because frequent experimental failures and the risks of obsolescence can be supported only if an invention promising commercial success is adequately protected. No one will take the risk of research and discovery unless so protected. These firms who will continue to do research work will tend to by-pass the patent system altogether and resort to secrecy.

As regards the ceiling on royalties, our submission is that in any event, royalty payments have been strictly regulated by the Government of India administratively from time to time and that for the last 4 years royalty has not been allowed to exceed 5 per cent. Further payment of royalties to the Patent holders within India can also be regulated by the Controller and by the appeal provisions ensured that it is not unreasonably high.

The framers of the Model BIRPI law have stated that a compulsory licence should only be granted subject to payment of adequate royalties commensurate with the extent to which the invention is worked. They have further stated that as it is practically impossible to predict at the time of the grant of licence, of what economic value it will be to the licensee, a lump sum compensation would be haphazard and arbitrary. Justice Ayyangar has also stated in his Report that it is not feasible to arrive at a uniform rate of royalty which would be reasonable for licensee in respect of each and every invention and that it is not desirable to fix statutorily the maximum rate of allowable royalty.

One cannot dispute the fact that at present the country does not possess sufficient know-how to manufacture a majority of the common and important drugs in use at present. Now, know-how is connected with patent protection, in that, it is only after the inventor has been assured that his invention has adequate protec-

tion that he will make efforts by way of further research and process development to convert a laboratory discovery into a pilot plant production and from pilot plant production to a commercial feasibility.

Not all patented products are marketed or are commercially successful. It is only when a patented product can be made capable of industrial application by the use of know-how that a patent becomes useful to the inventor. Hence the benefits derived from the successful product have to meet the research cost incurred on many commercially unsuccessful patented products. It has been proved that only one out of about 5000 chemical substances become a successful discovery. Merely granting licences of right will not compel the inventor to part with his valuable know-how if he has the fear that his invention will be made use of by any person just for the asking on payment of inadequate compensation. This argument will apply with even greater force as and when India develops its own technology and will adversely affect the Indian research work. Know-how is private property of the discoverer and patent law cannot compel him to part with it against his wishes. Indiscriminate licensing provisions will certainly enable any person to apply for a licence of right, but in the absence of adequate know-how he will not be able to achieve lower unit cost of production from higher yields or to produce drugs of the same quality as those of the inventor. There is no doubt that the flow of technological know-how from abroad will gradually diminish. This will ultimately also affect the export market of pharmaceuticals which look forward to new products made according to international standards.

The object underlying clauses 87 and 88 can be taken care of by the compulsory licensing provisions of the Bill where, in the public interest and in the interests of larger production, the Controller can grant compulsory licence and apply the tests which are necessary to ensure that the applicant is duly qualified to work the invention.

It is doubtful whether clause 87 and clause 88 as reported by the Committee will eliminate the social costs of patents. However, assuming without admitting that it is true, one should not forget that such a system will eliminate the social gains. Proposals for licence of right and ceiling on royalties have been rejected in every country where they are made.

(L)

Clause 102—Acquisition of inventions:

This clause gives powers to the Central Government to acquire the invention for a public purpose by notifying its intention in that behalf. It is significant to note that this clause recognises the principle that a patent is a species of intangible property and hence provides for compensation if such property is acquired for a public purpose.

We are firmly of the opinion that such complete expropriation of patent rights is undesirable in the present economic conditions of the country and there is no legitimate reason to do so. In view of the ample means provided for in the Bill under clauses 99 and 100 which enable the Government to make use of a patented invention we feel that this clause is unnecessary and should be deleted.

NEW DELHI;
November 1, 1966.

P. D. HIMATSINGKA.
DR. L. M. SINGHVI
V. B. GANDHI.
DR. C. B. SINGH.
SHAM LAL SARAF
P. C. BOROOAH

THE PATENTS BILL, 1965
(AS REPORTED BY THE JOINT COMMITTEE)

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ARRANGEMENT OF CLAUSES
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THE SCHEDULE.

Bill No. 62B of 1965

THE PATENTS BILL, 1965

[AS REPORTED BY THE JOINT COMMITTEE]

[Words side-lined or underlined indicate the amendments suggested by the Committee; asterisks indicate omissions.]

A

BILL

to amend and consolidate the law relating to patents.

BE it enacted by Parliament in the Seventeenth Year of the Republic of India as follows:—

CHAPTER I

PRELIMINARY

1. (1) This Act may be called the Patents Act, 1966.

(2) It extends to the whole of India.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint:

Short
title,
extent
and con-
mence-
ment.

Provided that different dates may be appointed for different provisions of this Act, and any reference in any such provision to the commencement of this Act shall be construed as a reference to the coming into force of that provision.

38. Shri Dahyabhai V. Patel
39. Shri Mulka Govinda Reddy
40. Shri M. R. Shervani
41. Dr. M. M. S. Siddhu
42. Shri Dalpat Singh
43. Shri R. P. Sinha

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Department of Industry, Ministry of Industry & Supply.*
4. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

L. S. Davar & Co., *Patent & Trade Mark Attorneys, Calcutta.*
Shri L. S. Davar

L. S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta.

Spokesman:

Shri L. S. Davar

(The Witness was called in and he took his seat).

Mr. Chairman: We have received your memorandum which has been distributed to all the Members. Do you want to add anything to it? You may add now, and then Members will ask you questions. I presume you represent the Patent and Trade Mark Attorneys, Calcutta.

Shri L. S. Davar: Yes, Sir. May it please Your Honour, if I may be permitted, I would like to give to the hon. Members a general idea of the development of the patent system in this world. That will be the basis upon which the patent system has been formed not only in other countries but also in India. Then, I will deal with the philosophy of the

patent system and then I will deal with the points which have been raised in the memorandum which I have already submitted to the Committee, and then the implications of the submissions which I have made on the proposed Bill.

Regarding the development of the patent system, in the middle of the 16th century, when England was in a low stage of industrial development in relation to its neighbouring countries, it had the desire to industrialise itself. To fulfil that desire, England imported the craftsmen as well as the inventions from other countries. As an inducement to the importation of the knowledge and the know-how of the inventions, they gave what they called a certain amount of privilege which resulted in patents. That formed ultimately the basis of the patent system in England. The same thing happened about 200 years afterwards in the United States. When the United States got its independence in 1774,

the know-how and the inventions as well as the machinery were all in the hands of the British people, and they controlled the import of the know-how and the inventions as well as the machines to America. The United States was faced with a predicament as to how to industrialise itself. At that time, George Washington, in his inaugural address "urged the expediency to give effectual encouragement as well to the introduction of new and useful inventions from abroad as to the exercise of skill and genius at home." as a result of the policy of the first President of the United States, the patent system was introduced in the United States in 1790.

Coming to the patterns of the other Governments, firstly; the USSR, historically, the USSR introduced the patent system in 1812 and a planned and co-ordinated development of science and technology has therefore made Russia a great industrial and technical power. The introduction of a system of encouraging inventions played a large role in the economic and industrial development of that country. The patent system in Russia is based on public recognition of the personal interest of the inventor. When the new regime came to power, a new law relating to the patents was introduced and although it is the general belief among the public that there is no patent system in Russia, I would like the hon. Members to know that in 1964, 91,000 patents were filed in Russia as against about 65,000 in America and about 45,000 in England, and a similar number in countries like Germany and Japan. Of course, in Russia, there are two systems of patents: one is the system which we understand in the non-communist countries or what we understand in this country, and the other is the author's certificate, namely, the Government has got the right to use the invention, but when the Government uses the invention, it pays a certain amount of royalty or remuneration to the inventor, depending upon the profit

which the organisation of the Government realises in that particular field, although the maximum profit which an inventor can get from his invention is limited to 22,000 dollars. The other system which Russia has got is the normal patent system. For example, any person in India can apply for a patent and if Russia respects the rights of the patent in the sense that if anybody else from another country or even in his own country wants to infringe the rights of a foreigner in Russia who is the patent-holder, then the Government will protect that right and prevent the importation of machinery or any article made according to the process into Russia and if at all it is necessary to import, they will ask the importer to pay a certain amount of royalty to the patent-holder. That is the position in Russia.

I have given to the hon. Members, the basis of the patent system both in the communist countries and the non-communist countries. I would now like to explain to the hon. Members what is the philosophy of the patent system.

Shri Shrivani: He might give us the history of development of the patent laws in Japan also, before he proceeds to the next point.

Shri L. S. Davar: In view of the fact that one of the hon. Members has raised the point as to the history of patent law in Japan, I might say that the patent law in Japan is based on the system as obtains in any other country.

Shri Arjun Arora: When did that come into being in Japan?

Shri L. S. Davar: With your permission, Mr. Chairman, I might answer this question straightway.

Mr. Chairman: The questions will follow afterwards; otherwise, there will be no end.

Shri L. S. Davar: I might as well deal with one point here with regard

to Japan. Although it has been considered, and many people have the impression, that Japan is the biggest imitator, I may point out that that conception might have been right perhaps 20 years ago or in the pre-war period, but since the war period, Japan has improved its technology by importing the know-how from other countries and obtaining licences from other countries and at present, Japan is the leading country in the world in respect of the number of patents which are being granted there. The law is the same as in any other country, whether it be the United States of America, the United Kingdom or, for that matter, India; only certain details or provisions may slightly differ, but the principal basis upon which patent law is framed in Japan is the same as in any other country.

What is the philosophy of the patent system? We must appreciate that the inventor, the man who creates anything new, has the inherent right to keep what he invents secret and work it himself. It depends upon what profit he makes—that is immaterial—but he has the inherent right, the natural right to keep it secret to himself. Now, if he discloses to the public or discloses to the Government on behalf of the public, the Government says, since he has faithfully and honestly disclosed what he had the inherent right to keep a secret they will give him a reward. That reward is not in the form of a monopoly but a reward for the scientific achievement or improvement which the man concerned has made and which he discloses to the Government.

What is the effect of that on the economy or what is the social effect of that in the country? When a new invention comes out in the country it gives a cue to the other people to know that here is a field in which they can also develop or find out alternative products or alternative processes. Secondly, supposing a man comes to me and says: "I have got a wonderful idea; are you pre-

pared to invest Rs. 5 lakhs?" Then I will ask him: "What is that wonderful idea?" Naturally, he will say: "First promise me that you are going to put in the money, otherwise I am not going to disclose". But, if he has a patent he can openly go to any prospective investor and say that he has such and such an idea, he has the patent which covers that idea, he has the protection and then ask him whether he is prepared to invest the money in it or not. Therefore, it can induce the prospective investor to invest money in developing that particular invention. That is another advantage, that development of industry can take place by virtue of the patent system.

Now, the other philosophy is that once an idea becomes common to the public after 17 years or 15 years of protection—whatever the term is—when the term of patent expires everyone is entitled to use it. That is another advantage to the public, namely, that the disclosure of the invention results in the prospect of people investing money in that industry and making the invention free to the public after the term of patent expires and thus giving inspiration to others to make inventions in the same field.

This is the philosophy of the patent system and the whole philosophy, therefore, turns round on this point, namely, that the industrial development in the country should take place. That is the whole idea behind it. Therefore, the object of our patent law should be that industry in our country should develop.

Now, in many countries, not only in India, there is a general feeling that this sort of monopoly is being abused. How is that being abused? It is abused in this way that a foreigner has got patent in this country, he does not work that invention, he has the monopoly in that particular product or particular process, he is the only person who can export from his country into our country, his

CHAPTER II

INVENTIONS NOT PATENTABLE

3. The following are not inventions within the meaning of this Act— What are not inventions.

5 (a) an invention which is frivolous or which claims anything obviously contrary to well established natural laws;

(b) an invention the primary or intended use of which would be contrary to law or morality or injurious to public health;

10 (c) the mere discovery of a scientific principle or the formulation of an abstract theory;

(d) the mere discovery of any new property or new use for a known substance or of the mere new use of a known process, machine or apparatus;

15 (e) ** a substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance;

(f) the mere arrangement or re-arrangement or duplication of known devices each functioning independently of one another in a known way;

25 (g) a method or process of testing applicable during the process of manufacture for rendering the machine, apparatus or other equipment more efficient or for the improvement or restoration of the existing machine, apparatus or other equipment or for the improvement or control of manufacture;

(h) a method of agriculture or horticulture;

30 (i) any process for the medicinal, surgical, curative, prophylactic or other treatment of man or any process for a similar treatment of animals or plants to render them free of disease or to increase their economic value or that of their products.

4. No patent shall be granted in respect of an invention relating to atomic energy falling within sub-section (1) of section 20 of the Atomic Energy Act, 1962. Inventions relating to atomic energy not patentable.

Inventions where only methods or processes of manufacture and substances when produced by such methods or processes patent-able.

5. In the case of inventions—

(a) claiming substances intended for use, or capable of being used, as food or as medicine or drug, or

(b) relating to substances prepared or produced by chemical processes (including alloys, optical glass, semi-conductors and inter-metallic compounds),

the patent shall be granted only in respect of claims for the method or process of manufacture and in respect of claims for the substances when produced by such method or process.

CHAPTER III

10

APPLICATIONS FOR PATENTS

Persons entitled to apply for patents.

6. (1) Subject to the provisions contained in section 134, an application for a patent for an invention may be made by any of the following persons, that is to say,—

(a) by any person claiming to be the true and first inventor of the invention;

(b) by any person being the assignee of the person claiming to be the true and first inventor in respect of the right to make such an application;

(c) by the legal representative of any deceased person who immediately before his death was entitled to make such an application.

(2) An application under sub-section (1) may be made by any of the persons referred to therein either alone or jointly with any other person.

25

Form of application.

7. (1) Every application for a patent shall be for one invention only and shall be made in the prescribed form and filed in the patent office.

(2) Where the application is made by virtue of an assignment of the right to apply for a patent for the invention, there shall be furnished with the application or within such period as may be prescribed after the filing of the application, proof of the right to make the application.

(3) Every application under this section shall state that the applicant is in possession of the invention and shall name the owner

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claiming to be the true and first inventor; and where the person so claiming is not the applicant or one of the applicants, the application shall contain a declaration that the applicant believes the person so named to be the true and first inventor.

5 (4) Every such application (not being a convention application) shall be accompanied by a provisional or a complete specification.

8. (1) Where an applicant for a patent under this Act is prosecuting either alone or jointly with any other person an application for a patent in any country outside India in respect of the
10 same or substantially the same invention, or where to his knowledge such an application is being prosecuted by some person through whom he claims or by some person deriving title from him, he shall file along with his application—

Information and undertaking regarding foreign applications.

15 (a) a statement setting out the name of the country where the application is being prosecuted, the serial number and date of filing of the application and such other particulars as may be prescribed; and

20 (b) an undertaking that, up to the date of the acceptance of his complete specification filed in India, he would keep the Controller informed in writing, from time to time, of details of the nature referred to in clause (a) in respect of every other application relating to the same or substantially the same invention, if any, filed in any country outside India subsequently
25 to the filing of the statement referred to in the aforesaid clause, within eight weeks from the date of the matter coming to his knowledge.

(2) The Controller may also require the applicant to furnish, as far as may be available to the applicant, details relating to the objections, if any, taken to any such application as is referred to
30 in sub-section (1) on the ground that the invention is lacking in novelty or patentability, the amendments effected in the specifications, the claims allowed in respect thereof and such other particulars as he may require.

9. (1) Where an application for a patent (not being a convention
35 application) is accompanied by a provisional specification, a complete specification shall be filed within twelve months from the date of filing of the application, and if the complete specification is not so filed the application shall be deemed to be abandoned:

Provisional and complete specifications.

40 Provided that the complete specification may be filed at any time after twelve months but within fifteen months from the date aforesaid, if a request to that effect is made to the Controller and the prescribed fee is paid on or before the date on which the complete specification is filed.

(2) Where two or more applications in the name of the same applicant are accompanied by provisional specifications in respect of inventions which are cognate or of which one is a modification of another and the Controller is of opinion that the whole of such inventions are such as to constitute a single invention and may properly be included in one patent, he may allow one complete specification to be filed in respect of all such provisional specifications.

(3) Where an application for a patent (not being a convention application) is accompanied by a specification purporting to be a complete specification, the Controller may, if the applicant so requests at any time before the acceptance of the application, direct that such specification shall be treated for the purposes of this Act as a provisional specification and proceed with the application accordingly.

(4) Where a complete specification has been filed in pursuance of an application for a patent accompanied by a provisional specification or by a specification treated by virtue of a direction under sub-section (3) as a provisional specification, the Controller may, if the applicant so requests at any time before the acceptance of the application, cancel the provisional specification and post-date the application to the date of filing of the complete specification.

Contents of specifications.

10. (1) Every specification, whether provisional or complete, shall describe the invention and shall begin with a title sufficiently indicating the subject-matter to which the invention relates.

(2) Subject to any rules that may be made in this behalf under this Act, drawings may, and shall, if the Controller so requires, be supplied for the purposes of any specification, whether complete or provisional; and any drawings so supplied shall, unless the Controller otherwise directs, be deemed to form part of the specification, and references in this Act to a specification shall be construed accordingly.

(3) If in any particular case the Controller considers that an application should be further supplemented by a model or sample of anything illustrating the invention or alleged to constitute an invention, such model or sample as he may require shall be furnished before the acceptance of the application, but such model or sample shall not be deemed to form part of the specification.

(4) Every complete specification shall—

(a) fully and particularly describe the invention and its operation or use and the method by which it is to be performed;

(b) disclose the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection; and

(c) end with a claim or claims defining the scope of the invention for which protection is claimed.

(5) The claim or claims of a complete specification shall relate to a single invention, shall be clear and succinct and shall be fairly based on the matter disclosed in the specification.

(6) A declaration as to the inventorship of the invention shall, in such cases as may be prescribed, be furnished in the prescribed form with the complete specification or within such period as may be prescribed after the filing of that specification.

10 (7) Subject to the foregoing provisions of this section, a complete specification filed after a provisional specification may include claims in respect of developments of, or additions to, the invention which was described in the provisional specification, being developments or additions in respect of which the applicant would be entitled under 15 the provisions of section 6 to make a separate application for a patent.

11. (1) There shall be a priority date for each claim of a complete specification. Priority dates of claims of a complete specification.

(2) Each claim of a complete specification shall indicate the date 20 which the applicant considers to be the priority date of that claim.

(3) Where a complete specification is filed in pursuance of a single application accompanied by—

(a) a provisional specification; or

25 (b) a specification which is treated by virtue of a direction under sub-section (3) of section 9 as a provisional specification;

and the claim is fairly based on the matter disclosed in the specification referred to in clause (a) or clause (b), the priority date of that claim shall be the date of the filing of the relevant specification.

30 (4) Where the complete specification is filed or proceeded with in pursuance of two or more applications accompanied by such specifications as are mentioned in sub-section (3) and the claim is fairly based on the matter disclosed—

35 (a) in one of those specifications, the priority date of that claim shall be the date of filing of the application accompanied by that specification;

(b) partly in one and partly in another, the priority date of that claim shall be the date of the filing of the application accompanied by the specification of the later date.

(5) Where the complete specification has been filed in pursuance of a further application made by virtue of sub-section (1) of section 16 and the claim is fairly based on the matter disclosed in any of the earlier specifications, provisional or complete, as the case may be, the priority date of that claim shall be the date of the filing of that specification in which the matter was first disclosed. 5

(6) Where, under the foregoing provisions of this section, any claim of a complete specification would, but for the provisions of this sub-section, have two or more priority dates, the priority date of that claim shall be the earlier or earliest of those dates. 10

(7) In any case to which sub-section (3), (4), (5) and (6) do not apply, the priority date of a claim shall, subject to the provisions of section 137, be the date of filing of the complete specification.

(8) The reference to the date of the filing of the application or of the complete specification in this section shall, in cases where there has been a post-dating under section 9 or section 17 or, as the case may be, an ante-dating under section 16, be a reference to the date as so post-dated or ante-dated. 15

(9) A claim in a complete specification of a patent shall not be invalid by reason only of— 20

(a) the publication or use of the invention so far as claimed in that claim on or after the priority date of such claim; or

(b) the grant of another patent which claims the invention, so far as claimed in the first mentioned claim, in a claim of the same or a later priority date. 25

CHAPTER IV

EXAMINATION OF APPLICATIONS

12. (1) When the complete specification has been filed in respect of an application for a patent, the application and the specification relating thereto shall be referred by the Controller to an examiner for making a report to him in respect of the following matters, namely:— 30

(a) whether the application and the specification relating thereto are in accordance with the requirements of this Act and of any rules made thereunder; 35

(b) whether there is any lawful ground of objection to the grant of the patent under this Act in pursuance of the application; 35

(c) the result of investigations made under section 13;

(d) whether the priority date of each claim as indicated by the applicant is the priority date of that claim as determined by this Act; and

5 (e) any other matter which may be prescribed.

(2) The examiner to whom the application and the specification relating thereto are referred under sub-section (1) shall ordinarily make the report to the Controller within a period of eighteen months from the date of such reference.

10 13. (1) The examiner to whom an application for a patent is referred under section 12 shall make investigation for the purpose of ascertaining whether the invention so far as claimed in any claim of the complete specification—

Search for anti-cipation by previous publication and by prior claim.

15 (a) has been anticipated by publication before the date of filing of the applicant's complete specification in any specification filed in pursuance of an application for a patent made in India and dated on or after the 1st day of January, 1912;

20 (b) is claimed in any claim of any other complete specification published on or after the date of filing of the applicant's complete specification, being a specification filed in pursuance of an application for a patent made in India and dated before or claiming the priority date earlier than that date.

25 (2) The examiner shall, in addition, make such investigation as the Controller may direct for the purpose of ascertaining whether the invention, so far as claimed in any claim of the complete specification, has been anticipated by publication in India or elsewhere in any document other than those mentioned in sub-section (1) before the date of filing of the applicant's complete specification.

30 (3) Where a complete specification is amended under the provisions of this Act before it has been accepted, the amended specification shall be examined and investigated in like manner as the original specification.

35 (4) The examination and investigations required under section 12 and this section shall not be deemed in any way to warrant the validity of any patent, and no liability shall be incurred by the Central Government or any officer thereof by reason of, or in connection with, any such examination or investigation or any report or other proceedings consequent thereon.

Consideration of report of examiner by controller.

14. Where, in respect of an application for a patent, the report of the examiner received by the Controller is adverse to the applicant or requires any amendment of the application or of the specification to ensure compliance with the provisions of this Act or of the rules made thereunder, the Controller, before proceeding to dispose of the application in accordance with the provisions hereinafter appearing, shall communicate the gist of the objections to the applicant and shall, if so required by the applicant within the prescribed time, give him an opportunity of being heard.

Power of Controller to refuse or require amendment applications in certain cases.

15. (1) Where the Controller is satisfied that the application or any specification filed in pursuance thereof does not comply with the requirements of this Act or of any rules made thereunder, the Controller may either—

(a) refuse to proceed with the application; or

(b) require the application, specification or drawings to be amended to his satisfaction before he proceeds with the application.

(2) If it appears to the Controller that the invention claimed in the specification is not an invention within the meaning of, or is not patentable under, this Act, he shall refuse the application.

(3) If it appears to the Controller that any invention in respect of which an application for a patent is made might be used in any manner contrary to law, he may refuse the application, unless the specification is amended by the insertion of such disclaimer in respect of that use of the invention, or such other reference to the illegality thereof, as the Controller thinks fit.

Power of Controller to make orders respecting division of application.

16. (1) A person who has made an application for a patent under this Act may, at any time before the acceptance of the complete specification, if he so desires, or with a view to remedy the objection raised by the Controller on the ground that the claims of the complete specification relate to more than one invention, file a further application in respect of an invention disclosed in the provisional or complete specification already filed in respect of the first mentioned application.

(2) The further application under sub-section (1) shall be accompanied by a complete specification, but such complete specification shall not include any matter not in substance disclosed in the complete specification filed in pursuance of the first mentioned application.

(3) The Controller may require such amendment of the complete specification filed in pursuance of either the original or the further application as may be necessary to ensure that neither of the said complete specifications includes a claim for any matter claimed in the other.

Explanation.—For the purposes of this Act, the further application and the complete specification accompanying it shall be deemed to have been filed on the date on which the complete specification in pursuance of the first mentioned application had been filed, and the further application shall, subject to the determination of the priority date under sub-section (5) of section 11, be proceeded with as a substantive application.

17. (1) Subject to the provisions of section 9, at any time after the filing of an application and before acceptance of the complete specification under this Act, the Controller may, at the request of the applicant made in the prescribed manner, direct that the application shall be post-dated to such date as may be specified in the request, and proceed with the application accordingly:

Power of Controller to make orders respecting dating of application.

Provided that no application shall be post-dated under this sub-section to a date later than six months from the date on which it was actually made or would, but for the provisions of this sub-section, be deemed to have been made.

(2) Where an application or specification (including drawings) is required to be amended under clause (b) of sub-section (1) of section 15, the application or specification shall, if the Controller so directs, be deemed to have been made on the date on which the requirement is complied with or where the application or specification is returned to the applicant, on the date on which it is re-filed after complying with the requirement.

18. (1) Where it appears to the Controller that the invention so far as claimed in any claim of the complete specification has been anticipated in the manner referred to in clause (a) of sub-section (1) or sub-section (2) of section 13, he may refuse to accept the complete specification unless the applicant—

Powers of Controller in cases of anticipation.

(a) shows to the satisfaction of the Controller that the priority date of the claim of his complete specification is not later than the date on which the relevant document was published; or

(b) amends his complete specification to the satisfaction of the Controller.

(2) If it appears to the Controller that the invention is claimed in a claim of any other complete specification referred to in clause (b) of sub-section (1) of section 13, he may, subject to the provisions hereinafter contained, direct that a reference to that other specification shall be inserted by way of notice to the public in the applicant's complete specification unless within such time as may be prescribed,—

(a) the applicant shows to the satisfaction of the Controller that the priority date of his claim is not later than the priority date of the claim of the said other specification; or 10

(b) the complete specification is amended to the satisfaction of the Controller.

(3) If it appears to the Controller, as a result of an investigation under section 13 or otherwise,—

(a) that the invention so far as claimed in any claim of the applicant's complete specification has been claimed in any other complete specification referred to in clause (a) of sub-section (1) of section 13; and 15

(b) that such other complete specification was published on or after the priority date of the applicant's claim; 20

then, unless it is shown to the satisfaction of the Controller that the priority date of the applicant's claim is not later than the priority date of the claim of that specification, the provisions of sub-section (2) shall apply thereto in the same manner as they apply to a specification published on or after the date of filing of the applicant's complete specification. 25

(4) Any order of the Controller under sub-section (2) or sub-section (3) directing the insertion of a reference to another complete specification shall be of no effect unless and until the other patent is granted. 30

Powers of Controller in case of potential infringement. 19. (1) If, in consequence of the investigations required by the foregoing provisions of this Act or of proceedings under section 25, it appears to the Controller that an invention in respect of which an application for a patent has been made cannot be performed without substantial risk of infringement of a claim of any other patent, he may direct that a reference to that other patent shall be inserted in 35

the applicant's complete specification by way of notice to the public, unless within such time as may be prescribed—

5 (a) the applicant shows to the satisfaction of the Controller that there are reasonable grounds for contesting the validity of the said claim of the other patent; or

(b) the complete specification is amended to the satisfaction of the Controller;

(2) Where, after a reference to another patent has been inserted in a complete specification in pursuance of a direction under sub-
10 section (1)—

(a) that other patent is revoked or otherwise ceases to be in force; or

(b) the specification of that other patent is amended by the deletion of the relevant claim; or

15 (c) it is found, in proceedings before the court or the Controller, that the relevant claim of that other patent is invalid or is not infringed by any working of the applicant's invention;

the Controller may, on the application of the applicant, delete the reference to that other patent.

20 20. (1) If the Controller is satisfied, on a claim made in the prescribed manner at any time before a patent has been granted, that by virtue of any assignment or agreement in writing made by the applicant or one of the applicants for the patent or by operation of law, the claimant would, if the patent were then granted, be entitled
25 thereto or to the interest of the applicant therein, or to an undivided share of the patent or of that interest, the Controller may, subject to the provisions of this section, direct that the application shall proceed in the name of the claimant or in the names of the claimants
and the applicant or the other joint applicant or applicants, accord-
30 ingly as the case may require.

Powers of Controller to make orders regarding substitution of applicants, etc.

(2) No such direction as aforesaid shall be given by virtue of any assignment or agreement made by one of two or more joint applicants for a patent except with the consent of the other joint applicant or applicants.

35 (3) No such direction as aforesaid shall be given by virtue of any assignment or agreement for the assignment of the benefit of an invention unless—

(a) the invention is identified therein by reference to the number of the application for the patent; or

(b) there is produced to the Controller an acknowledgment by the person by whom the assignment or agreement was made that the assignment or agreement relates to the invention in respect of which that application is made; or

(c) the rights of the claimant in respect of the invention have been finally established by the decision of a court; or

(d) the Controller gives directions for enabling the application to proceed or for regulating the manner in which it should be proceeded with under sub-section (5).

(4) Where one of two or more joint applicants for a patent dies at any time before the patent has been granted, the Controller may, upon a request in that behalf made by the survivor or survivors, and with the consent of the legal representative of the deceased, direct that the application shall proceed in the name of the survivor or survivors alone.

(5) If any dispute arises between joint applicants for a patent whether or in what manner the application should be proceeded with, the Controller may, upon application made to him in the prescribed manner by any of the parties, and after giving to all parties concerned an opportunity to be heard, give such directions as he thinks fit for enabling the application to proceed in the name of one or more of the parties alone or for regulating the manner in which it should be proceeded with, or for both those purposes, as the case may require.

Time for putting application in order for acceptance.

21. (1) An application for a patent shall be deemed to have been abandoned unless within fifteen months from the date on which the first statement of objections to the application or complete specification is forwarded by the Controller to the applicant or within such longer period as may be allowed under the following provisions of this section the applicant has complied with all the requirements imposed on him by or under this Act, whether in connection with the complete specification or otherwise in relation to the application.

Explanation.—Where the application or any specification or, in the case of a convention application, any document filed as part of the application has been returned to the applicant by the Controller in the course of the proceedings, the applicant shall not be deemed to have complied with such requirements unless and until he has re-filed it.

(2) The period of fifteen months specified in sub-section (1) shall, on request made by the applicant in the prescribed manner and before the expiration of the period so specified, be extended for a further period so requested (hereafter in this section referred to as the extended period), so, however, that the total period for complying with the requirements of the Controller does not exceed eighteen months from the date on which the objections referred to in sub-section (1) are forwarded to the applicant.

(3) If at the expiration of the period of fifteen months specified in sub-section (1) or the extended period—

(a) an appeal to the High Court is pending in respect of the application for the patent for the main invention, or

(b) in the case of an application for a patent of addition, an appeal to the High Court is pending in respect of either that application or the application for the main invention,

the time within which the requirements of the Controller shall be complied with shall, on an application made by the applicant before the expiration of the said period of fifteen months or the extended period, as the case may be, be extended until such date as the High Court may determine.

(4) If the time within which the appeal mentioned in sub-section (3) may be instituted has not expired, the Controller may extend the period of fifteen months, or as the case may be, the extended period, until the expiration of such further period as he may determine:

Provided that if an appeal has been filed during the said further period, and the High Court has granted any extension of time for complying with the requirements of the Controller, then, the requirements may be complied with within the time granted by the Court.

22. Subject to the provisions of section 21, the complete specification filed in pursuance of an application for a patent may be accepted by the Controller at any time after the applicant has complied with the requirements mentioned in sub-section (1) of that section, and, if not so accepted within the period allowed under that section for compliance with those requirements, shall be accepted as soon as may be thereafter:

Provided that the applicant may make an application to the Controller in the prescribed manner requesting him to postpone acceptance until such date (not being later than eighteen months from the date on which the objections referred to in sub-section (1) of section 21 are forwarded to the applicant) as may be specified

Acceptance of complete specification.

in the application, and, if such application is made, the Controller may postpone acceptance accordingly.

Advertisement of acceptance of complete specification.

23. On the acceptance of a complete specification, the Controller shall give notice thereof to the applicant and shall advertise in the Official Gazette the fact that the specification has been accepted, and thereupon the application and the specification with the drawings (if any) filed in pursuance thereof shall be open to public inspection.

Effect of acceptance of complete specification.

24. On and from the date of advertisement of the acceptance of a complete specification and until the date of sealing of a patent in respect thereof, the applicant shall have the like privileges and rights as if a patent for the invention had been sealed on the date of advertisement of acceptance of the complete specification:

Provided that the applicant shall not be entitled to institute any proceedings for infringement until the patent has been sealed.

CHAPTER V

OPPOSITION TO GRANT OF PATENT

Opposition to grant of patent.

25. (1) At any time within four months from the date of advertisement of the acceptance of a complete specification under this Act (or within such further period not exceeding one month in the aggregate as the Controller may allow on application made to him in the prescribed manner before the expiry of the four months aforesaid) any person interested may give notice to the Controller of opposition to the grant of the patent on any of the following grounds, namely:—

(a) that the applicant for the patent or the person under or through whom he claims, wrongfully obtained the invention or any part thereof from him or from a person under or through whom he claims;

(b) that the invention so far as claimed in any claim of the complete specification has been published before the priority date of the claim—

(i) in any specification filed in pursuance of an application for a patent made in India on or after the 1st day of January, 1912; or

(ii) in India or elsewhere, in any other document:

Provided that the ground specified in sub-clause (ii) shall not be available where such publication does not constitute an anticipation of the invention by virtue of sub-section (2) or sub-section (3) of section 29;

(c) that the invention so far as claimed in any claim of the complete specification is claimed in a claim of a complete

specification published on or after the priority date of the applicant's claim and filed in pursuance of an application for a patent in India, being a claim of which the priority date is earlier than that of the applicant's claim;

5 (d) that the invention so far as claimed in any claim of the complete specification was known or used in India before the priority date of that claim.

10 *Explanation.*—For the purposes of this clause, an invention relating to a process for which a patent is claimed shall be deemed to have been known or used in India before the priority date of the claim if a product made by that process had already been imported into India before that date except where such importation has been for the purpose of reasonable trial or experiment only;

15 (e) that the invention so far as claimed in any claim of the complete specification is obvious and clearly does not involve any inventive step, having regard to the matter published as mentioned in clause (b) or having regard to what was used in India before the priority date of the applicant's claim;

20 (f) that the subject of any claim of the complete specification is not an invention within the meaning of this Act, or is not patentable under this Act;

25 (g) that the complete specification does not sufficiently and clearly describe the invention or the method by which it is to be performed;

(h) that the applicant has failed to disclose to the Controller the information required by section 8 or has furnished the information which in any material particular was false to his knowledge;

30 (i) that in the case of a convention application, the application was not made within twelve months from the date of the first application for protection for the invention made in a convention country by the applicant or a person from whom he derives title;

35 but on no other ground.

(2) Where any such notice of opposition is duly given, the Controller shall notify the applicant and shall give to the applicant and the opponent an opportunity to be heard before deciding the case.

(3) The grant of a patent shall not be refused on the ground stated in clause (c) of sub-section (1) if no patent has been granted in pursuance of the application mentioned in that clause; and for

the purpose of any inquiry under clause (d) or clause (e) of that sub-section, no account shall be taken of any secret use.

In cases of "Obtaining" Controller may treat application as application of opponent.

26. (1) Where in any opposition proceeding under this Act—

(a) the Controller finds that the invention, so far as claimed in any claim of the complete specification, was obtained from the opponent in the manner set out in clause (a) of sub-section (1) of section 25 and refuses the application on that ground, he may, on request by such opponent made in the prescribed manner, direct that the application shall proceed in the name of the opponent as if the application and the specification had been filed by the opponent on the date on which they were actually filed;

(b) the Controller finds that a part of an invention described in the complete specification was so obtained from the opponent and passes an order requiring that the specification be amended by the exclusion of that part of the invention, the opponent may, subject to the provisions of sub-section (2), file an application in accordance with the provisions of this Act accompanied by a complete specification for the grant of a patent for the invention so excluded from the applicant's specification, and the Controller may treat such application and specification as having been filed, for the purposes of this Act relating to the priority dates of claims of the complete specification, on the date on which the corresponding document was or was deemed to have been filed by the earlier applicant, but for all other purposes the application of the opponent shall be proceeded with as an application for a patent under this Act.

(2) Where an opponent has, before the date of the order of the Controller requiring the amendment of a complete specification referred to in clause (b) of sub-section (1), filed an application for a patent for an invention which includes the whole or a part of the invention held to have been obtained from him and such application is pending, the Controller may treat such application and specification in so far as they relate to the invention held to have been obtained from him, as having been filed, for the purposes of this Act, relating to the priority dates of claims of the complete specification, on the date on which the corresponding document was or was deemed to have been filed by the earlier applicant, but for all other purposes the application of the opponent shall be proceeded with as an application for a patent under this Act.

Refusal of patent without opposition.

27. If at any time after the acceptance of the complete specification filed in pursuance of an application for a patent and before the grant of a patent thereon it comes to the notice of the Controller otherwise than in consequence of proceedings in opposition to the

grant under section 25, that the invention, so far as claimed in any claim of the complete specification, has been published * * before the priority date of the claim—

5 (a) in any specification filed in pursuance of an application for a patent made in India and dated on or after the 1st day of January, 1912;

(b) in any other document in India or elsewhere, * *

the Controller may refuse to grant the patent unless, within such time as may be prescribed, the complete specification is amended to 10 his satisfaction:

Provided that the Controller shall not refuse to grant the patent on the ground specified in clause (b) if such publication does not constitute an anticipation of the invention by virtue of sub-section (2) or sub-section (3) of section 29.

15 28. (1) If the Controller is satisfied, upon a request or claim made in accordance with the provisions of this section,—

Mention
of in
ventor as
such in
patent.

(a) that the person in respect of or by whom the request or claim is made is the inventor of an invention in respect of which application for a patent has been made, or of a substantial part 20 of that invention; and

(b) that the application for the patent is a direct consequence of his being the inventor;

the Controller shall, subject to the provisions of this section, cause him to be mentioned as inventor in any patent granted in pursuance 25 of the application in the complete specification and in the register of patents:

Provided that the mention of any person as inventor under this section shall not confer or derogate from any rights under the patent.

30 (2) A request that any person shall be mentioned as aforesaid may be made in the prescribed manner by the applicant for the patent or (where the person alleged to be the inventor is not the applicant or one of the applicants) by the applicant and that person.

(3) If any person [other than a person in respect of whom a re- 35 quest in relation to the application in question has been made under sub-section (2)] desires to be mentioned as aforesaid, he may make a claim in the prescribed manner in that behalf.

(4) A request or claim under the foregoing provisions of this section shall be made not later than two months after the date of ad- 40 vertisement of acceptance of the complete specification or within

such further period (not exceeding one month) as the Controller may, on an application made to him in that behalf before the expiration of the said period of two months and subject to the payment of the prescribed fee, allow.

(5) No request or claim under the foregoing provisions of this section shall be entertained if it appears to the Controller that the request or claim is based upon facts which, if proved in the case of an opposition under the provisions of clause (a) of sub-section (1) of section 25 by the person in respect of or by whom the request or claim is made, would have entitled him to relief under that section. 10

(6) Subject to the provisions of sub-section (5), where a claim is made under sub-section (3), the Controller shall give notice of the claim to every applicant for the patent (not being the claimant) and to any other person whom the Controller may consider to be interested; and before deciding upon any request or claim made under sub- 15 section (2) or sub-section (3), the Controller shall, if required, hear the person in respect of or by whom the request or claim is made, and, in the case of a claim under sub-section (3), any person to whom notice of the claim has been given as aforesaid.

(7) Where any person has been mentioned as inventor in pursu- 20 ance of this section, any other person who alleges that he ought not to have been so mentioned may at any time apply to the Controller for a certificate to that effect, and the Controller may, after hearing, if required, any person whom he may consider to be interested, issue such a certificate, and if he does so, he shall rectify the specification 25 and the register accordingly.

CHAPTER VI

ANTICIPATION

Anticipa-
tion by
previous
publca-
tion.

29. (1) An invention claimed in a complete specification shall not be deemed to have been anticipated by reason only that the inven- 30 tion was published in a specification filed in pursuance of an application for a patent made in India and dated before the 1st day of January, 1912.

(2) Subject as hereinafter provided, an invention claimed in a complete specification shall not be deemed to have been anticipated 35 by reason only that the invention was published before the priority

date of the relevant claim of the specification, if the patentee or the applicant for the patent proves—

(a) that the matter published was obtained from him, or (where he is not himself the true and first inventor) from any person from whom he derives title, and was published without his consent or the consent of any such person; and

(b) where the patentee or the applicant for the patent or any person from whom he derives title learned of the publication before the date of the application for the patent, or, in the case of a convention application, before the date of the application for protection in a convention country, that the application or the application in the convention country, as the case may be, was made as soon as reasonably practicable thereafter:

Provided that this sub-section shall not apply if the invention was before the priority date of the claim commercially worked in India, otherwise than for the purpose of reasonable trial, either by the patentee or the applicant for the patent or any person from whom he derives title or by any other person with the consent of the patentee or the applicant for the patent or any person from whom he derives title.

(3) Where a complete specification is filed in pursuance of an application for a patent made by a person being the true and first inventor or deriving title from him, an invention claimed in that specification shall not be deemed to have been anticipated by reason only of any other application for a patent in respect of the same invention made in contravention of the rights of that person, or by reason only that after the date of filing of that other application the invention was used or published, without the consent of that person, by the applicant in respect of that other application, or by any other person in consequence of any disclosure of any invention by that applicant.

30. An invention claimed in a complete specification shall not be deemed to have been anticipated by reason only of the communication of the invention to the Government or to any person authorised by the Government to investigate the invention or its merits, or of anything done, in consequence of such a communication, for the purpose of the investigation.

Anticipation by previous communication to Government.

31. An invention claimed in a complete specification shall not be deemed to have been anticipated by reason only of—

Anticipation by public display, etc.

(a) the display of the invention with the consent of the true and first inventor or a person deriving title from him at an

industrial or other exhibition to which the provisions of this section have been extended by the Central Government by notification in the Official Gazette, or the use thereof with his consent for the purpose of such an exhibition in the place where it is held; or

(b) the publication of any description of the invention in consequence of the display or use of the invention at any such exhibition as aforesaid; or

(c) the use of the invention, after it has been displayed or used at any such exhibition as aforesaid and during the period of the exhibition, by any person without the consent of the true and first inventor or a person deriving title from him; or

(d) the description of the invention in a paper read by the true and first inventor before a learned society or published with his consent in the transactions of such a society;

if the application for the patent is made by the true and first inventor or a person deriving title from him not later than six months after the opening of the exhibition or the reading or publication of the paper, as the case may be.

Anticipa-
tion by
public
working.

32. An invention claimed in a complete specification shall not be deemed to have been anticipated by reason only that at any time within one year before the priority date of the relevant claim of the specification, the invention was publicly worked in India—

(a) by the patentee or applicant for the patent or any person from whom he derives title; or

(b) by any other person with the consent of the patentee or applicant for the patent or any person from whom he derives title;

if the working was effected for the purpose of reasonable trial only and if it was reasonably necessary, having regard to the nature of the invention, that the working for that purpose should be effected in public.

Anticipa-
tion by
use and
publica-
tion after
provi-
sional
specifica-
tion.

33. (1) Where a complete specification is filed or proceeded with in pursuance of an application which was accompanied by a provisional specification or where a complete specification filed along with an application is treated by virtue of a direction under subsection (3) of section 9 as a provisional specification, then, notwithstanding anything contained in this Act, the Controller shall not refuse to grant the patent, and the patent shall not be revoked

or invalidated, by reason only that any matter described in the provisional specification or in the specification treated as aforesaid as a provisional specification was used in India or published in India or elsewhere at any time after the date of the filing of that
5 specification.

(2) Where a complete specification is filed in pursuance of a convention application, then, notwithstanding anything contained in this Act, the Controller shall not refuse to grant the patent, and the patent shall not be revoked or invalidated, by reason only that
10 any matter disclosed in any application for protection in a convention country upon which the convention application is founded was used in India or published in India or elsewhere at any time after the date of that application for protection.

34. Notwithstanding anything contained in this Act, the Controller shall not refuse to accept a complete specification for a patent or to grant a patent, and a patent shall not be revoked or invalidated by reason only of any circumstances which, by virtue of section 29 or section 30 or section 31 or section 32, do not constitute an anticipation of the invention claimed in the specification.
15

No anticipation if circumstances are only as described in sections 29, 30, 31 and 32.

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CHAPTER VII

PROVISIONS FOR SECRECY OF CERTAIN INVENTIONS

35. (1) Where, in respect of an application made before or after the commencement of this Act for a patent, it appears to the Controller that the invention is one of a class notified to him by the
25 Central Government as relevant for defence purposes, or, where otherwise the invention appears to him to be so relevant, he may give directions for prohibiting or restricting the publication of information with respect to the invention or the communication of such information to any person or class of persons specified in the
30 directions.

Secrecy directions relating to inventions relevant for defence purposes.

(2) Where the Controller gives any such directions as are referred to in sub-section (1), he shall give notice of the application and of the directions to the Central Government, and the Central Government shall, upon receipt of such notice, consider whether the
35 publication of the invention would be prejudicial to the defence of India, and if upon such consideration, it appears to it that the publication of the invention would not so prejudice, give notice to the Controller to that effect, who shall thereupon revoke the directions and notify the applicant accordingly.

(3) Without prejudice to the provisions contained in sub-section (1), where the Central Government is of opinion that an invention in respect of which the Controller has not given any directions under sub-section (1), is relevant for defence purposes, it may at any time before acceptance of the complete specification notify the Controller to that effect, and thereupon the provisions of that sub-section shall apply as if the invention were one of the class notified by the Central Government, and accordingly the Controller shall give notice to the Central Government of the directions issued by him.

Secrecy directions to be periodically re-viewed.

36. (1) The question whether an invention in respect of which directions have been given under section 35 continues to be relevant for defence purposes shall be re-considered by the Central Government within nine months from the date of issue of such directions and thereafter at intervals not exceeding twelve months, and if, on such re-consideration it appears to the Central Government that the publication of the invention would no longer be prejudicial to the defence of India it shall forthwith give notice to the Controller accordingly and the Controller shall thereupon revoke the directions previously given by him.

(2) The result of every re-consideration under sub-section (1) shall be communicated to the applicant within such time and in such manner as may be prescribed.

Consequences of secrecy directions.

37. (1) So long as any directions under section 35 are in force in respect of an application—

(a) the Controller shall not pass an order refusing to accept the same; and

(b) notwithstanding anything contained in this Act, no appeal shall lie from any order of the Controller passed in respect thereof:

Provided that the application may, subject to the directions, proceed up to the stage of the acceptance of the complete specification, but the acceptance shall not be advertised nor the specification published, and no patent shall be granted in pursuance of the application.

(2) Where a complete specification filed in pursuance of an application for a patent for an invention in respect of which directions have been given under section 35 is accepted during the continuance in force of the directions, then—

(a) if, during the continuance in force of the directions, any use of the invention is made by or on behalf of, or to the order of the Government, the provisions of sections 100, 101 and 103

shall apply in relation to that use as if the patent had been granted for the invention; and

(b) if it appears to the Central Government that the applicant for the patent has suffered hardship by reason of the continuance in force of the directions, the Central Government may make to him such payment (if any) by way of solatium as appears to the Central Government to be reasonable having regard to the novelty and utility of the invention and the purpose for which it is designed, and to any other relevant circumstances.

(3) Where a patent is granted in pursuance of an application in respect of which directions have been given under section 35, no renewal fee shall be payable in respect of any period during which those directions were in force.

38. When any direction given under section 35 is revoked by the Controller, then, notwithstanding any provision of this Act specifying the time within which any step should be taken or any act done in connection with an application for the patent, the Controller may, subject to such conditions, if any, as he thinks fit to impose, extend the time for doing anything required or authorised to be done by or under this Act in connection with the application, whether or not that time has previously expired.

Revocation of secrecy directions and extension of time.

39. (1) No person resident in India shall, except under the authority of a written permit granted by or on behalf of the Controller, make or cause to be made any application outside India for the grant of a patent for an invention unless—

Residents not to apply for patents outside India without prior permission.

(a) an application for a patent for the same invention has been made in India, not less than six weeks before the application outside India; and

(b) either no directions have been given under sub-section (1) of section 35 in relation to the application in India, or all such directions have been revoked.

(2) The Controller shall not grant written permission to any person to make any application outside India without the prior consent of the Central Government.

(3) This section shall not apply in relation to an invention for which an application for protection has first been filed in a country outside India by a person resident outside India.

Liability for contravention of section 35 or section 39.

40. Without prejudice to the provisions contained in Chapter XX, if in respect of an application for a patent any person contravenes any direction as to secrecy given by the Controller under section 35 or makes or causes to be made an application 'or 'he grant of a patent outside India in contravention of section 39, the application for patent under this Act shall be deemed to have been abandoned and the patent granted, if any, shall be liable to be revoked under section 64.

Finality of orders of Controller and Central Government.

41. All orders of the Controller giving directions as to secrecy as well as all orders of the Central Government under this Chapter shall be final and shall not be called in question in any court on any ground whatsoever.

Savings respecting disclosure to Government.

42. Nothing in this Act shall be held to prevent the disclosure by the Controller of information concerning an application for a patent or a specification filed in pursuance thereof to the Central Government * *, for the purpose of the application or specification being examined for considering whether an order under this Chapter should be made or whether an order so made should be revoked.

CHAPTER VIII

GRANT AND SEALING OF PATENTS AND RIGHTS CONFERRED THEREBY

Grant and sealing of patent.

43. (1) Where a complete specification in pursuance of an application for a patent has been accepted and either—

(a) the application has not been opposed under section 25 and the time for the filing of the opposition has expired; or

(b) the application has been opposed and the opposition has been finally decided in favour of the applicant; or

(c) the application has not been refused by the Controller by virtue of any power vested in him by this Act;

the patent shall, on request made by the applicant in the prescribed form, be granted to the applicant or, in the case of a joint application, to the applicants jointly, and the Controller shall cause the patent to be sealed with the seal of the patent office and the date on which the patent is sealed shall be entered in the register.

(2) Subject to the provisions of sub-section (1) and of the provisions of this Act with respect to patents of addition, a request under this section for the sealing of a patent shall be made not later than the expiration of a period of six months from the date of advertisement of the acceptance of the complete specification:

Provided that—

5 (a) where at the expiration of the said six months any proceeding in relation to the application for the patent is pending before the Controller or the High Court, the request may be made within the prescribed period after the final determination of that proceeding;

10 (b) where the applicant or one of the applicants has died before the expiration of the time within which under the provisions of this sub-section the request could otherwise be made, the said request may be made at any time within twelve months after the date of the death or at such later time as the Controller may allow.

15 (3) The period within which under sub-section (2) a request for the sealing of a patent may be made may, from time to time, be extended by the Controller to such longer period as may be specified in an application made to him in that behalf, if the application is made and the prescribed fee paid within that longer period:

Provided that the first mentioned period shall not be extended under this sub-section by more than three months in the aggregate.

20 *Explanation.*—For the purposes of this section a proceeding shall be deemed to be pending so long as the time for any appeal therein (apart from any future extension of that time) has not expired, and a proceeding shall be deemed to be finally determined when the time for any appeal therein (apart from any such extension) has expired
25 without the appeal being brought.

30 44. Where, at any time after a patent has been sealed in pursuance of an application under this Act, the Controller is satisfied that the person to whom the patent was granted had died, or, in the case of a body corporate, had ceased to exist, before the patent was sealed, the Controller may amend the patent by substituting for the name of that person the name of the person to whom the patent ought to have been granted, and the patent shall have effect, and shall be deemed always to have had effect, accordingly. Amend-
ment of
patent
granted
to deceas-
ed appli-
cant.

35 45. (1) Subject to the other provisions contained in this Act, Date of every patent shall be dated as of the date on which the complete patent specification was filed.

(2) The date of every patent shall be entered in the register.

(3) Notwithstanding anything contained in this section, no suit or other proceeding shall be commenced or prosecuted in respect of an infringement committed before the date of advertisement of the acceptance of the complete specification.

Form,
extent
and
effect of
patent.

46. (1) Every patent shall be in the prescribed form and shall have effect throughout India. 5

(2) A patent shall be granted for one invention only:

Provided that it shall not be competent for any person in a suit or other proceeding to take any objection to a patent on the ground that it has been granted for more than one invention. 10

Rights of
patentees

47. (1) Subject to the other provisions contained in this Act, a patent granted, whether before or after the commencement of this Act, shall confer upon the patentee—

(a) where the patent is for an article or substance, the exclusive right by himself, his agents or licensees to make, use, exercise, sell or distribute such article or substance in India; 15

(b) where a patent is for a process of manufacturing an article or substance, the exclusive right by himself, his agents or licensees to use or exercise the process in India and of using or selling in India articles or substances made by such process and of authorising others so to do. 20

(2) The rights conferred on the patentee by this section shall be exercisable only subject to the provisions of any other law for the time being in force.

Patent
rights
not in-
fringed
when
used
for
certain
purposes.

48. Notwithstanding anything contained in this Act,— 25

(a) the importation by or on behalf of the Government of any patented machine, apparatus or other article for the purpose merely of its own use, or

(b) the importation by or on behalf of the Government of any patented medicine or drug for the purpose merely of its own use or for distribution in any dispensary, hospital or other medical institution maintained by or on behalf of the Government or any other dispensary, hospital or other medical institution which, the Central Government may, having regard to the public service that such dispensary, hospital or medical institution renders, specify in this behalf by notification in the Official Gazette, or 35

(c) the making of a patented machine, apparatus or other article or the use of a patented process or the making of an article by the use of the patented process by or on behalf of the Government for the purpose merely of its own use or by persons on its behalf who may be specially authorised for the purpose, or 40

(d) the making or use of a patented machine or apparatus or other article or the use of a patented process or the use of an article made by the use of the patented process, machine or apparatus for the purpose merely of experiment or research, including the imparting of instructions to pupils,

shall not be deemed to constitute an infringement of the rights conferred on the patentee by this Act in respect of a patent granted, whether before or after the commencement of this Act.

49. (1) Where a vessel or aircraft registered in a foreign country or a land vehicle owned by a person ordinarily resident in such country comes into India (including the territorial waters thereof) temporarily or accidentally only, the rights conferred by a patent for an invention shall not be deemed to be infringed by the use of the invention—

Patent rights infringed when used on foreign vessels, etc., temporarily or accidentally in India.

(a) in the body of the vessel or in the machinery, tackle, apparatus or other accessories thereof, so far as the invention is used on board the vessel and for its actual needs only; or

(b) in the construction or working of the aircraft or land vehicle or of the accessories thereof;

as the case may be.

(2) This section shall not extend to vessels, aircraft or land vehicles owned by persons ordinarily resident in a foreign country the laws of which do not confer corresponding rights with respect to the use of inventions in vessels, aircraft or land vehicles owned by persons ordinarily resident in India while in the ports or within the territorial waters of that foreign country or otherwise within the jurisdiction of its courts.

50. (1) Where a patent is granted to two or more persons, each of those persons shall, unless an agreement to the contrary is in force, be entitled to an equal undivided share in the patent.

Rights of co-owners of patent

(2) Subject to the provisions contained in this section and in section 51, where two or more persons are registered as grantee or proprietor of a patent, then, unless an agreement to the contrary is in force, each of those persons shall be entitled, by himself or his agents, to make, use, exercise and sell the patented invention for his own benefit without accounting to the other person or persons.

(3) Subject to the provisions contained in this section and in section 51 and to any agreement for the time being in force, where two or more persons are registered as grantee or proprietor of a patent, then, a licence under the patent shall not be granted and a share in the patent shall not be assigned by one of such persons except with the consent of the other person or persons.

(4) Where a patented article is sold by one of two or more persons registered as grantee or proprietor of a patent, the purchaser and any person claiming through him shall be entitled to deal with the article in the same manner as if the article had been sold by a sole patentee.

5

(5) Subject to the provisions contained in this section, the rules of law applicable to the ownership and devolution of movable property generally shall apply in relation to patents; and nothing contained in sub-section (1) or sub-section (2) shall affect the mutual rights or obligations of trustees or of the legal representatives of a deceased person or their rights or obligations as such.

10

(6) Nothing in this section shall affect the rights of the assignees of a partial interest in a patent created before the commencement of this Act.

power of
controller
to give
directions
to co-
owners.

51. (1) Where two or more persons are registered as grantee or proprietor of a patent, the Controller may, upon application made to him in the prescribed manner by any of those persons, give such directions in accordance with the application as to the sale or lease of the patent or any interest therein, the grant of licences under the patent, or the exercise of any right under section 50 in relation thereto, as he thinks fit.

15

20

(2) If any person registered as grantee or proprietor of a patent fails to execute any instrument or to do any other thing required for the carrying out of any direction given under this section within fourteen days after being requested in writing so to do by any of the other persons so registered, the Controller may, upon application made to him in the prescribed manner by any such other person, give directions empowering any person to execute that instrument or to do that thing in the name and on behalf of the person in default.

25

(3) Before giving any directions in pursuance of an application under this section, the Controller shall give an opportunity to be heard—

30

(a) in the case of an application under sub-section (1), to the other person or persons registered as grantee or proprietor of the patent;

35

(b) in the case of an application under sub-section (2), to the person in default.

(4) No direction shall be given under this section so as to affect the mutual rights or obligations of trustees or of the legal representatives of a deceased person or of their rights or obligations as such, or which is inconsistent with the terms of any agreement between persons registered as grantee or proprietor of the patent.

40

52. (1) Where a patent has been revoked on the ground that the patent was obtained wrongfully and in contravention of the rights of the petitioner or any person under or through whom he claims, or, where in a petition for revocation, the court, instead of revoking the patent, directs the complete specification to be amended by the exclusion of a claim or claims in consequence of a finding that the invention covered by such claim or claims had been obtained from the petitioner, the court may, by order passed in the same proceeding, permit the grant to the petitioner of the whole or such part of the invention which the court finds has been wrongfully obtained by the patentee, in lieu of the patent so revoked or is excluded by amendment.

Grant of patent to true and first inventor where it has been obtained by another in fraud of him.

(2) Where any such order is passed, the Controller shall, on request by the petitioner made in the prescribed manner grant to him—

(i) in cases where the court permits the whole of the patent to be granted, a new patent bearing the same date and number as the patent revoked;

(ii) in cases where the court permits a part only of the patent to be granted, a new patent for such part bearing the same date as the patent revoked and numbered in such manner as may be prescribed:

Provided that the Controller may as a condition of such grant require the petitioner to file a new and complete specification to the satisfaction of the Controller describing and claiming that part of the invention for which the patent is to be granted.

(3) No suit shall be brought for any infringement of a patent granted under this section committed before the actual date on which such patent was granted.

53. (1) Subject to the provisions of this Act, the term of every patent granted under this Act shall—

Term of patent.

(a) in respect of an invention claiming the method or process of manufacture of a substance, where the substance is intended for use, or is capable of being used, as food or as a medicine or drug, be ten years from the date of the patent; and

(b) in respect of any other invention, be fourteen years from the date of the patent.

(2) Notwithstanding anything contained in the Indian Patents and Designs Act, 1911, or in the patent granted thereunder, the term of every patent granted under that Act in respect of an invention claiming a substance or the method or process of manufacture in

respect thereof, where the substance is intended for use, or is capable of being used as food or as medicine or drug shall be—

(a) ten years from the commencement of this Act, or

(b) sixteen years from the date as of which the patent was sealed under the Indian Patents and Designs Act, 1911, whichever is less:

Provided that where at the commencement of this Act any such patent is in force by reason of an extension granted under the Act aforesaid, the patent shall cease to have effect on the expiration of the period of such extension.

(3) A patent shall cease to have effect notwithstanding anything therein or in this Act on the expiration of the period prescribed for the payment of any renewal fee, if that fee is not paid within the prescribed period or within that period as extended under this section.

(4) The period prescribed for the payment of any renewal fee shall be extended to such period, not being more than six months longer than the prescribed period, as may be specified in a request made to the Controller if the request is made and the renewal fee and the prescribed additional fee paid before the expiration of the period so specified.

CHAPTER IX

PATENTS OF ADDITION

patents of
addition.

54. (1) Subject to the provisions contained in this section, where an application is made for a patent in respect of any improvement in or modification of an invention described or disclosed in the complete specification filed therefor (in this Act referred to as the "main invention") and the applicant also applies or has applied for a patent for that invention or is the patentee in respect thereof, the Controller may, if the applicant so requests, grant the patent for the improvement or modification as a patent of addition.

(2) Subject to the provisions contained in this section, where an invention, being an improvement in or modification of another invention, is the subject of an independent patent and the patentee in respect of that patent is also the patentee in respect of the patent for the main invention, the Controller may, if the patentee so requests, by order, revoke the patent for the improvement or modification and grant to the patentee a patent of addition in respect thereof, bearing the same date as the date of the patent so revoked.

(3) A patent shall not be granted as a patent of addition unless the date of filing of the complete specification was the same as or later than the date of filing of the complete specification in respect of the main invention.

(4) A patent of addition shall not be sealed before the sealing of the patent for the main invention; and if the period within which,

but for the provisions of this sub-section, a request for the sealing of a patent of addition could be made under section 43 expires before the period within which a request for the sealing of the patent for the main invention may be so made, the request for the sealing of the patent of addition may be made at any time within the last mentioned period.

56. (1) A patent of addition shall be granted for a term equal to that of the patent for the main invention, or so much thereof as has not expired, and shall remain in force during that term or until the previous cesser of the patent for the main invention and no longer: Term of patents of addition.

Provided that if the patent for the main invention is revoked under this Act, the court, or, as the case may be, the Controller, on request made to him by the patentee in the prescribed manner, may order that the patent of addition shall become an independent patent for the remainder of the term for the patent for the main invention and thereupon the patent shall continue in force as an independent patent accordingly.

(2) No renewal fees shall be payable in respect of a patent of addition, but, if any such patent becomes an independent patent under sub-section (1), the same fees shall thereafter be payable, upon the same dates, as if the patent had been originally granted as an independent patent.

56. (1) The grant of a patent of addition shall not be refused, and a patent granted as a patent of addition shall not be revoked or invalidated, on the ground only that the invention claimed in the complete specification does not involve any inventive step having regard to any publication or use of— Validity of patents of addition.

(a) the main invention described in the complete specification relating thereto; or

(b) any improvement in or modification of the main invention described in the complete specification of a patent of addition to the patent for the main invention or of an application for such a patent of addition;

and the validity of a patent of addition shall not be questioned on the ground that the invention ought to have been the subject of an independent patent.

(2) For the removal of doubts it is hereby declared that in determining the novelty of the invention claimed in the complete specification filed in pursuance of an application for a patent of addition regard shall be had also to the complete specification in which the main invention is described.

CHAPTER X

AMENDMENT OF APPLICATIONS AND SPECIFICATIONS

Amend-
ment of
applica-
tion and
specifica-
tion before
Controller.

57. (1) Subject to the provisions of section 59, the Controller may, upon application made under this section in the prescribed manner by an applicant for a patent or by a patentee, allow the application for the patent or the complete specification to be amended subject to such conditions, if any, as the Controller thinks fit: 5

Provided that the Controller shall not pass any order allowing or refusing an application to amend an application for a patent or a specification under this section while any suit before a court for the infringement of the patent or any proceeding before the High Court for the revocation of the patent is pending, whether the suit or proceeding commenced before or after the filing of the application to amend. 10

(2) Every application for leave to amend an application for a patent or a specification under this section shall state the nature of the proposed amendment, and shall give full particulars of the reasons for which the application is made. 15

(3) Every application for leave to amend an application for a patent or a specification under this section made after the acceptance of the complete specification and the nature of the proposed amendment shall be advertised in the prescribed manner. 20

(4) Where an application is advertised under sub-section (3), any person interested may, within the prescribed period after the advertisement thereof, give notice to the Controller of opposition thereto; and where such a notice is given within the period aforesaid, the Controller shall notify the person by whom the application under this section is made and shall give to that person and to the opponent an opportunity to be heard before he decides the case. 25

(5) An amendment under this section of a complete specification may be, or include, an amendment of the priority date of a claim. 30

(6) The provisions of this section shall be without prejudice to the right of an applicant for a patent to amend his specification to comply with the directions of the Controller issued before the acceptance of the complete specification or in the course of proceedings in opposition to the grant of a patent. 35

Amend-
ment of
specifica-
tion before
High
Court.

58. (1) In any proceeding before the High Court for the revocation of a patent, the High Court may, subject to the provisions contained in section 59, allow the patentee to amend his complete specification in such manner and subject to such terms as to costs, advertisement or otherwise, as the High Court may think fit, and if in any proceedings for revocation the High Court decides that the patent is invalid, it may allow the specification to be amended under this section instead of revoking the patent. 40

(2) Where an application for an order under this section is made to the High Court, the applicant shall give notice of the application to the Controller, and the Controller shall be entitled to appear and be heard, and shall appear if so directed by the High Court.

(3) Copies of all orders of the High Court allowing the patentee to amend the specification shall be transmitted by the High Court to the Controller who shall on receipt thereof cause an entry thereof and reference thereto to be made in the register.

59. (1) No amendment of an application for a patent or a complete specification shall be made except by way of disclaimer, correction or explanation, and no amendment thereof shall be allowed, except for the purpose of correcting an obvious mistake, and no amendment of a complete specification shall be allowed the effect of which would be that the specification as amended would claim or describe matter not in substance disclosed in the specification before the amendment, or that any claim of the specification as amended would not fall wholly within the scope of a claim of the specification before the amendment. Supplementary provisions as to amendment of application or specification.

(2) Where after the date of advertisement of acceptance of a complete specification, any amendment of the specification is allowed by the Controller or by the High Court,—

(a) the amendment shall for all purposes be deemed to form part of the specification;

(b) the fact that the specification has been amended shall be advertised in the Official Gazette; and

(c) the right of the applicant or patentee to make amendment shall not be called in question except on the ground of fraud.

(3) In construing the specification as amended, reference may be made to the specification as originally accepted.

CHAPTER XI

RESTORATION OF LAPSED PATENTS

60. (1) Where a patent has ceased to have effect by reason of failure to pay any renewal fee within the prescribed period or within that period as extended under sub-section (4) of section 53, the patentee or his legal representative, and where the patent was held by two or more persons jointly, then, with the leave of the Controller, one or more of them without joining the others, may, within one year from the date on which the patent ceased to have effect, make an application for the restoration of the patent. Applications for restoration of lapsed patents.

(2) The provisions of sub-section (1) shall also apply to patents granted before the commencement of this Act, subject to the modification that for the reference to the prescribed period or to sub-section (4) of section 53, there shall be substituted a reference to the period prescribed therefor under the Indian Patents and Designs Act, 1911 or to sub-section (2) of section 14 of that Act. 5

(3) An application under this section shall contain a statement, verified in the prescribed manner, fully setting out the circumstances which led to the failure to pay the prescribed fee, and the Controller may require from the applicant such further evidence as he may think necessary. 10

Procedure for disposal of applications for restoration of lapsed patents.

61. (1) If, after hearing the applicant in cases where the applicant so desires or the Controller thinks fit, the Controller is *prima facie* satisfied that the failure to pay the renewal fee was unintentional and that there has been no undue delay in the making of the application, he shall advertise the application in the prescribed manner; and within the prescribed period any person interested may give notice to the Controller of opposition thereto on either or both of the following grounds, that is to say,— 15

(a) that the failure to pay the renewal fee was not unintentional; or 20

(b) that there has been undue delay in the making of the application.

(2) If notice of opposition is given within the period aforesaid, the Controller shall notify the applicant, and shall give to him and to the opponent an opportunity to be heard before he decides the case. 25

(3) If no notice of opposition is given within the period aforesaid or if in the case of opposition, the decision of the Controller is in favour of the applicant, the Controller shall, upon payment of any unpaid renewal fee and such additional fee as may be prescribed, restore the patent and any patent of addition specified in the application which has ceased to have effect on the cesser of that patent. 30

(4) The Controller may, if he thinks fit as a condition of restoring the patent, require that an entry shall be made in the register of any document or matter which, under the provisions of this Act, has to be entered in the register but which has not been so entered. 35

Rights of patentees of lapsed patents which have been restored.

62. (1) Where a patent is restored, the rights of the patentee shall be subject to such provisions as may be prescribed and to such other provisions as the Controller thinks fit to impose for the protection or compensation of persons who may have begun to avail themselves of, or have taken definite steps by contract or otherwise to avail themselves of, the patented invention between the date when the patent ceased to have effect and the date of the advertisement of the application for restoration of the patent under this Chapter. 40

(2) No suit or other proceeding shall be commenced or prosecuted in respect of an infringement of a patent committed between the date on which the patent ceased to have effect and the date of the advertisement of the application for restoration of the patent.

CHAPTER XII

SURRENDER AND REVOCATION OF PATENTS

63. (1) A patentee may, at any time by giving notice in the prescribed manner to the Controller, offer to surrender his patent. Surrender of patents.

(2) Where such an offer is made, the Controller shall advertise the offer in the prescribed manner, and also notify every person other than the patentee whose name appears in the register as having an interest in the patent.

(3) Any person interested may, within the prescribed period after such advertisement, give notice to the Controller of opposition to the surrender, and where any such notice is given the Controller shall notify the patentee.

(4) If the Controller is satisfied after hearing the patentee and any opponent, if desirous of being heard, that the patent may properly be surrendered, he may accept the offer and, by order, revoke the patent.

64. (1) Subject to the provisions contained in this Act, a patent, whether granted before or after the commencement of this Act, may, on the petition of any person interested or of the Central Government or on a counter-claim in a suit for infringement of the patent, be revoked by the High Court on any of the following grounds, that is to say— Revocation of patents.

(a) that the invention, so far as claimed in any claim of the complete specification, was claimed in a valid claim of earlier priority date contained in the complete specification of another patent granted in India;

(b) that the patent was granted on the application of a person not entitled under the provisions of this Act to apply therefor:

Provided that a patent granted under the Indian Patents and Designs Act, 1911 shall not be revoked on the ground that the applicant was the communicatee or the importer of the invention in India and therefore not entitled to make an application for the grant of a patent under this Act;

(c) that the patent was obtained wrongfully in contravention of the rights of the petitioner or any person under or through whom he claims;

(d) that the subject of any claim of the complete specification is not an invention within the meaning of this Act;

(e) that the invention so far as claimed in any claim of the complete specification is not new, having regard to what was known or used in India before the priority date of the claim or to what was published in India or elsewhere in any of the documents referred to in section 13:

Provided that in relation to patents granted under the Indian Patents and Designs Act, 1911, this clause shall have effect as if the words "or elsewhere" had been omitted;

(f) that the invention so far as claimed in any claim of the complete specification is obvious or does not involve any inventive step, having regard to what was known or used in India or what was published in India or elsewhere before the priority date of the claim:

Provided that in relation to patents granted under the Indian Patents and Designs Act, 1911, this clause shall have effect as if the words "or elsewhere" had been omitted;

(g) that the invention, so far as claimed in any claim of the complete specification, is not useful;

(h) that the complete specification does not sufficiently and fairly describe the invention and the method by which it is to be performed, that is to say, that the description of the method or the instructions for the working of the invention as contained in the complete specification are not by themselves sufficient to enable a person in India possessing average skill in, and average knowledge of, the art to which the invention relates, to work the invention, or that it does not disclose the best method of performing it which was known to the applicant for the patent and for which he was entitled to claim protection;

(i) that the scope of any claim of the complete specification is not sufficiently and clearly defined or that any claim of the complete specification is not fairly based on the matter disclosed in the specification;

(j) that the patent was obtained on a false suggestion or representation;

(k) that the subject of any claim of the complete specification is not patentable under this Act;

(l) that the invention so far as claimed in any claim of the complete specification was secretly used in India, otherwise than as mentioned in sub-section (2), before the priority date of the claim;

(m) that the applicant for the patent has failed to disclose to the Controller the information required by section 8 or has furnished information which in any material particular was false to his knowledge;

(n) that the applicant contravened any direction for secrecy passed under section 35 or made or caused to be made an application for the grant of a patent outside India in contravention of section 39;

(o) that leave to amend the complete specification under section 57 or section 58 was obtained by fraud.

(2) For the purposes of clauses (e) and (f) of sub-section (1),—

(a) no account shall be taken of secret use; and

(b) where the patent is for a process or for a product as made by a process described or claimed, the importation into India of the product made abroad by that process shall constitute knowledge or use in India of the invention on the date of the importation, except where such importation has been for the purpose of reasonable trial or experiment only.

(3) For the purposes of clause (l) of sub-section (1), no account shall be taken of any use of the invention—

(a) for the purpose of reasonable trial or experiment only;

or

(b) by the Government or by any person authorised by the Government or by a Government undertaking, in consequence of the applicant for the patent or any person from whom he derives title having communicated or disclosed the invention directly or indirectly to the Government or person authorised as aforesaid or to the Government undertaking; or

(c) by any other person, in consequence of the applicant for the patent or any person from whom he derives title having communicated or disclosed the invention, and without the consent or acquiescence of the applicant or of any person from whom he derives title.

(4) Without prejudice to the provisions contained in sub-section (1), a patent may be revoked by the High Court on the petition of the Central Government, if the High Court is satisfied that the patentee has without reasonable cause failed to comply with the request of the Central Government to make, use or exercise the patented invention for the purposes of Government within the meaning of section 99 upon reasonable terms.

(5) A notice of any petition for revocation of a patent under this section shall be served on all persons appearing from the register to

be proprietors of that patent or to have shares or interests therein and it shall not be necessary to serve a notice on any other person.

Revocation of patent for amendment of complete specification on directions from Central Government in cases relating to atomic energy.

65. (1) Where at any time after acceptance of a complete specification, the Central Government is satisfied that an application for a patent or a patent is for an invention relating to atomic energy for which no patent can be granted under sub-section (1) of section 20 of the Atomic Energy Act, 1962, it may direct the Controller to refuse to proceed further with the application or to revoke the patent, as the case may be, and thereupon the Controller, after giving notice to the applicant or, as the case may be, to the patentee and every other person whose name has been entered in the register as having an interest in the patent, and after giving them an opportunity of being heard, may refuse to proceed further with the application or may revoke the patent.

(2) In any proceedings under sub-section (1), the Controller may allow the applicant for the patent or the patentee to amend the complete specification in such manner as he considers necessary instead of refusing to proceed with the application or revoking the patent.

Revocation of patent in public interest.

66. Where the Central Government is of opinion that a patent or the mode in which it is exercised is mischievous to the State or generally prejudicial to the public, it may, after giving the patentee an opportunity to be heard, make a declaration to that effect in the Official Gazette and thereupon the patent shall be deemed to be revoked.

CHAPTER XIII

REGISTER OF PATENTS

Register of patents and particulars to be entered therein.

67. (1) There shall be kept at the patent office a register of patents, wherein shall be entered—

- (a) the names and addresses of grantees of patents;
- (b) notifications of assignments and of transmissions of patents, of licences under patents, and of amendments, extensions, and revocations of patents; and
- (c) particulars of such other matters affecting the validity or proprietorship of patents as may be prescribed.

(2) No notice of any trust, whether express, implied or constructive, shall be entered in the register, and the Controller shall not be affected by any such notice.

(3) Subject to the superintendence and direction of the Central Government, the register shall be kept under the control and management of the Controller.

(4) For the removal of doubts, it is hereby declared that the register of patents existing at the commencement of this Act shall be incorporated in, and form part of, the register under this Act.

68. An assignment of a patent or of a share in a patent, a mortgage, licence or the creation of any other interest in a patent shall not be valid unless the same were in writing and the agreement between the parties concerned is reduced to the form of a document embodying all the terms and conditions governing their rights and obligations and the application for registration of such document is filed in the prescribed manner with the Controller within six months from the execution thereof or within such further period not exceeding six months in the aggregate as the Controller on application made in the prescribed manner allows: * *

Assignments, etc., not to be valid unless in writing and registered.

Provided that the document shall, when registered, have effect from the date of its execution.

69. (1) Where any person becomes entitled by assignment, transmission or operation of law to a patent or to a share in a patent or becomes entitled as a mortgagee, licensee or otherwise to any other interest in a patent, he shall apply in writing in the prescribed manner to the Controller for the registration of his title or, as the case may be, of notice of his interest in the register.

Registration of assignments, transmissions, etc.

(2) Without prejudice to the provisions of sub-section (1), an application for the registration of the title of any person becoming entitled by assignment to a patent or a share in a patent or becoming entitled by virtue of a mortgage, licence or other instrument to any other interest in a patent may be made in the prescribed manner by the assignor, mortgagor, licensor or other party to that instrument, as the case may be.

(3) Where an application is made under this section for the registration of the title of any person the Controller shall, upon proof of title to his satisfaction,—

(a) where that person is entitled to a patent or a share in a patent, register him in the register as proprietor or co-proprietor of the patent, and enter in the register particulars of the instrument or event by which he derives title; or

(b) where that person is entitled to any other interest in the patent, enter in the register notice of his interest, with particulars of the instrument, if any, creating it:

Provided that if there is any dispute between the parties whether the assignment, mortgage, licence, transmission, operation of law or any other such transaction has validity vested in such person a title to the patent or any share or interest therein, the Controller may refuse to take any action under clause (a) or, as the case may be,

under clause (b), until the rights of the parties have been determined by a competent court.

(4) There shall be supplied to the Controller in the prescribed manner for being filed in the patent office copies of all agreements, licences and other documents affecting the title to any patent or any licence thereunder authenticated in the prescribed manner and also such other documents as may be prescribed relevant to the subject-matter:

Provided that in the case of licences granted under a patent, the Controller shall, if so requested by the patentee or licensee, take steps for securing that the terms of the licence are not disclosed to any person except under the order of a court.

(5) Except for the purposes of an application under sub-section (1) or of an application to rectify the register, a document in respect of which no entry has been made in the register under sub-section (3) shall not be admitted by the Controller or by any court as evidence of the title of any person to a patent or to a share or interest therein unless the Controller or the court, for reasons to be recorded in writing, otherwise directs.

Power of registered grantee or Proprietor to deal with patent.

70. Subject to the provisions contained in this Act relating to co-ownership of patents and subject also to any rights vested in any other person of which notice is entered in the register, the person or persons registered as grantee or proprietor of a patent shall have power to assign, grant licences under, or otherwise deal with, the patent and to give effectual receipts for any consideration for any such assignment, licence or dealing:

Provided that any equities in respect of the patent may be enforced in like manner as in respect of any other movable property.

Rectification of register by High Court.

71. (1) The High Court may, on the application of any person aggrieved—

(a) by the absence or omission from the register of any entry; or

(b) by any entry made in the register without sufficient cause; or

(c) by any entry wrongly remaining on the register; or

(d) by any error or defect in any entry in the register;

make such order for the making, variation or deletion, of any entry therein as it may think fit.

(2) In any proceeding under this section the High Court may decide any question that may be necessary or expedient to decide in connection with the rectification of the register

(3) Notice of any application to the High Court under this section shall be given in the prescribed manner to the Controller who shall be entitled to appear and be heard on the application, and shall appear if so directed by the court.

5 (4) Any order of the High Court under this section rectifying the register shall direct that notice of the rectification shall be served upon the Controller in the prescribed manner who shall upon receipt of such notice rectify the register accordingly.

72. (1) Subject to the provisions contained in this Act and any 10 rules made thereunder, the register shall at all convenient times be open to inspection by the public; and certified copies, sealed with the seal of the patent office, of any entry in the register shall be given to any person requiring them on payment of the prescribed fee. Register to be open for inspection.

(2) The register shall be *prima facie* evidence of any matters 15 required or authorised by or under this Act to be entered therein.

CHAPTER XIV

PATENT OFFICE AND ESTABLISHMENT

73. (1) The Controller General of Patents, Designs and Trade 20 Marks appointed under sub-section (1) of section 4 of the Trade and Merchandise Marks Act, 1958, shall be the Controller of Patents for the purposes of this Act. Controller and other officers.

(2) The Central Government may appoint as many examiners and other officers and with such designations as it thinks fit for the purpose of discharging, under the superintendence and directions of 25 the Controller, such functions of the Controller under this Act as it may from time to time authorise them to discharge.

74. (1) For the purposes of this Act, there shall be an office which shall be known as the patent office. Patent office and its branches.

(2) The patent office provided by the Central Government under the Indian Patents and Designs Act, 1911, shall be the patent office under this Act. 30

(3) The head office of the patent office shall be at such place as the Central Government may specify, and for the purpose of facilitating the registration of patents there may be established, at such 35 other places as the Central Government may think fit, branch offices of the patent office.

(4) There shall be a seal of the patent office.

Restriction on employees of patent office as to right or interest in patents.

75. All officers and employees of the patent office shall be incapable, during the period for which they hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by that office.

Officers and employees not to furnish information,

76. An officer or employee in the patent office shall not, except when required or authorised by this Act or under a direction in writing of the Central Government or the Controller or by order of a court,—

(a) furnish information on a matter which is being, or has been, dealt with under this Act or under the Indian Patents and Designs Act, 1911; or

(b) prepare or assist in the preparation of a document required or permitted by or under this Act or under the Indian Patents and Designs Act, 1911, to be lodged in the patent office; or

(c) conduct a search in the records of the patent office.

CHAPTER XV

POWERS OF CONTROLLER GENERALLY

Controller to have certain powers of a civil court.

77. (1) Subject to any rules made in this behalf, the Controller in any proceedings before him under this Act shall have the powers of a civil court while trying a suit under the Code of Civil Procedure, 1908, in respect of the following matters, namely:—

(a) summoning and enforcing the attendance of any person and examining him on oath;

(b) requiring the discovery and production of any document;

(c) receiving evidence on affidavits;

(d) issuing commissions for the examination of witnesses or documents;

(e) awarding costs;

(f) reviewing his own decision on application made within the prescribed time and in the prescribed manner;

(g) setting aside an order passed ex parte on application made within the prescribed time and in the prescribed manner;

(h) any other matter which may be prescribed.

(2) Any order for costs awarded by the Controller in exercise of the powers conferred upon him under sub-section (1) shall be executable as a decree of a civil court.

78. (1) Without prejudice to the provisions contained in sections 57 and 59 as regards amendment of applications or complete specifications and subject to the provisions of section 44, the Controller may, in accordance with the provisions of this section, correct any clerical error in any patent or in any specification or other document filed in pursuance of such application or in any application for a patent or any clerical error in any matter which is entered in the register.

Power of
Controller
to correct
clerical
errors, etc.

(2) A correction may be made in pursuance of this section either upon a request in writing made by any person interested and accompanied by the prescribed fee, or without such a request.

(3) Where the Controller proposes to make any such correction as aforesaid otherwise than in pursuance of a request made under this section, he shall give notice of the proposal to the patentee or the applicant for the patent, as the case may be, and to any other person who appears to him to be concerned, and shall give them an opportunity to be heard before making the correction.

(4) Where a request is made under this section for the correction of any error in a patent or application for a patent or any document filed in pursuance of such an application, and it appears to the Controller that the correction would materially alter the meaning or scope of the document to which the request relates and ought not to be made without notice to persons affected thereby, he shall require notice of the nature of the proposed correction to be advertised in the prescribed manner.

(5) Within the prescribed time after any such advertisement as aforesaid any person interested may give notice to the Controller of opposition to the request, and, where such notice of opposition is given, the Controller shall give notice thereof to the person by whom the request was made, and shall give to him and to the opponent an opportunity to be heard before he decides the case.

79. Subject to any rules made in this behalf, in any proceeding under this Act before the Controller, evidence shall be given by affidavit in the absence of directions by the Controller to the contrary, but in any case in which the Controller thinks it right so to do, he may take oral evidence in lieu of, or in addition to, evidence by affidavit, or may allow any party to be cross-examined on the contents of his affidavit.

Evidence
how to be
given and
powers of
Controller
in respect
thereof.

80. Without prejudice to any provision contained in this Act requiring the Controller to hear any party to the proceedings thereunder or to give any such party an opportunity to be heard, the Controller shall give to any applicant for a patent, or for amendment of a specification (if within the prescribed time the applicant so

Exercise
of discre-
tionary
powers by
Controller

requires) an opportunity to be heard before exercising adversely to the applicant any discretion vested in the Controller by or under this Act.

Disposal
by
Control-
ler of
applica-
tions for
extension
of time.

81. Where under the provisions of this Act or the rules made there-
under the Controller may extend the time for doing any act, **nothing** 5
in this Act shall be deemed to require him to give notice to or hear
the party interested in opposing the extension, nor shall any appeal
lie from any order of the Controller granting such extension.

CHAPTER XVI

WORKING OF PATENTS, COMPULSORY LICENCES, LICENCES OF RIGHT AND 10 REVOCATION

Definitions
of "patent-
ed articles"
and
"patentee".

82. In this Chapter, unless the context otherwise requires,—

(a) "patented article" includes any article made by a patent-
ed process; and

(b) "patentee" includes an exclusive licensee. 15

General
principles
applicable
to working
of patented
inventions.

83. Without prejudice to the other provisions contained in this
Act, in exercising the powers conferred by this Chapter, regard shall
be had to the following general considerations, namely,—

(a) that patents are granted to encourage inventions and to
secure that the inventions are worked in India on a commercial 20
scale and to the fullest extent that is reasonably practicable
without undue delay; and

(b) that they are not granted merely to enable patentees to
enjoy a monopoly for the importation of the patented article.

Compul-
sory
licences.

84. (1) At any time after the expiration of three years from the 25
date of the sealing of a patent, any person interested may make an
application to the Controller alleging that the reasonable require-
ments of the public with respect to the patented invention have not
been satisfied or that the patented invention is not available to the
public at a reasonable price and praying for the grant of a compul- 30
sory licence to work the patented invention.

(2) An application under this section may be made by any person
notwithstanding that he is already the holder of a licence under the
patent and no person shall be estopped from alleging that the reason- 35
able requirements of the public with respect to the patented inven-
tion are not satisfied or that the patented invention is not available
to the public at a reasonable price by reason of any admission made
by him, whether in such a licence or otherwise or by reason of his
having accepted such a licence.

(3) Every application under sub-section (1) shall contain a state- 40
ment setting out the nature of the applicant's interest together with

such particulars as may be prescribed and the facts upon which the application is based.

(4) In considering the application filed under this section the Controller shall take into account the matters set out in section 85.

5 (5) The Controller, if satisfied that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price, may order the patentee to grant a licence upon such terms as he may deem fit.

10 (6) Where the Controller directs the patentee to grant a licence he may as incidental thereto exercise the powers set out in section 93.

* * * * *

15 85. In determining whether or not to make an order in pursuance of an application filed under section 84, the Controller shall take into account:—

Matters to be taken into account in granting compulsory licences.

(i) the nature of the invention, the time which has elapsed since the sealing of the patent and the measures already taken by the patentee or any licensee to make full use of the invention;

20 (ii) the ability of the applicant to work the invention to the public advantage;

* * * * *

25 (iii) the capacity of the applicant to undertake the risk in providing capital and working the invention, if the application were granted;

but shall not be required to take into account matters subsequent to the making of the application.

30 86. (1) At any time after the expiration of three years from the date of the sealing of a patent, the Central Government may make an application to the Controller for an order that the patent may be endorsed with the words "Licences of right" on the ground that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price.

Endorsement of patent with the words "Licences of right."

35 (2) The Controller, if satisfied that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price, may make an order that the patent be endorsed with the words "Licences of right".

40 (3) Where a patent of addition is in force, any application made under this section for an endorsement either of the original patent or of the patent of addition shall be treated as an application for the

endorsement of both patents, and where a patent of addition is granted in respect of a patent which is already endorsed under this section, the patent of addition shall also be so endorsed.

(4) All endorsements of patents made under this section shall be entered in the register and published in the Official Gazette and in such other manner as the Controller thinks desirable for bringing the endorsement to the notice of manufacturers. 5

Certain patents deemed to be endorsed with the words "Licences of right".

87. (1) Notwithstanding anything contained in this Act,—

(a) every patent in force at the commencement of this Act in respect of inventions relating to— 10

(i) substances used or capable of being used as food or as medicine or drug;

(ii) the methods or processes for the manufacture or production of any such substance as is referred to in sub-clause (i); 15

(iii) the methods or processes for the manufacture or production of chemical substances (including alloys, optical glass, semi-conductors and inter-metallic compounds); and

(b) every patent granted after the commencement of this Act in respect of any such invention as is referred to in section 20

5;

shall be deemed to be endorsed with the words "Licences of right", in the case of inventions referred to in clause (a), from the commencement of this Act, and, in the case of inventions referred to in clause (b), from the date of sealing of the patent. 25

(2) In respect of every patent which is deemed to be endorsed with the words "Licences of right" under this section, the provisions of section 88 shall apply.

Effect of endorsement of patent with the words "Licences of right".

88. (1) Where a patent has been endorsed with the words "Licences of right", any person who is interested in working the patented invention in India may require the patentee to grant him a licence for the purpose on such terms as may be mutually agreed upon, notwithstanding that he is already the holder of a licence under the patent. 30

(2) If the parties are unable to agree on the terms of the licence, either of them may apply in the prescribed manner to the Controller to settle the terms thereof. 35

(3) The Controller shall, after giving notice to the parties and hearing them and after making such enquiry as he may deem fit, decide the terms on which the licence shall be granted by the patentee. 40

(4) The Controller may at any time before the terms of the licence are mutually agreed upon or decided by the Controller, on application made to him in this behalf by any person who has made any such requisition as is referred to in sub-section (1), permit him 5 to work the patented invention on such terms as the Controller may, pending agreement between the parties or decision by the Controller, think fit to impose.

(5) In respect of every patent deemed to be endorsed with the words "Licences of right" under sub-clause (i) or sub-clause (ii) of 10 clause (a) of sub-section (1) of section 87, whether the patent was granted before or after the commencement of this Act, the royalty and other remuneration reserved to the patentee under a licence granted to any person after such commencement shall 15 in no case exceed four per cent. of the net ex-factory sale price in bulk of the patented article (exclusive of taxes levied under any law for the time being in force and any commissions payable) determined in such manner as may be prescribed.

(6) Save as otherwise provided in sub-section (5), the provisions of sub-sections (1), (2), (4), (5) and (6) of section 93 (regarding 20 the powers of the Controller) and of sections 94 and 95 shall apply to licences granted under this section as they apply to licences granted under section 84.

89. (1) Where, in respect of a patent, a compulsory licence has 25 been granted or the endorsement "Licences of right" has been made or is deemed to have been made, the Central Government or any person interested may, after the expiration of two years from the date of the order granting the first compulsory licence or, as the case may be, the date of the grant of the first licence under section 88, apply to the Controller for an order revoking the patent on the 30 ground that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price.

Revocation
of patents
by the
Controller
for non-
working.

(2) Every application under sub-section (1) shall contain such particulars as may be prescribed and the facts upon which the appli- 35 cation is based, and, in the case of an application other than by the Central Government, shall also set out the nature of the applicant's interest.

(3) The Controller, if satisfied that the reasonable requirements of the public with respect to the patented invention have not been 40 satisfied or that the patented invention is not available to the public at a reasonable price, may make an order revoking the patent.

(4) Every application under sub-section (1) shall ordinarily be decided within one year of its being presented to the Controller.

When reasonable requirements of the public deemed not satisfied.

90. For the purposes of sections 84, 86 and 89, the reasonable requirements of the public shall be deemed not to have been satisfied—

(a) if, by reason of the default of the patentee to manufacture in India to an adequate extent and supply on reasonable terms the patented article or a part of the patented article which is necessary for its efficient working or if, by reason of the refusal of the patentee to grant a licence or licences on reasonable terms,—

(i) an existing trade or industry or the development thereof or the establishment of any new trade or industry in India or the trade or industry of any person or classes of persons trading or manufacturing in India is prejudiced; or

(ii) the demand for the patented article is not being met to an adequate extent or on reasonable terms from manufacture in India; or

(iii) a market for the export of the patented article manufactured in India is not being supplied or developed or such market capable of being created is not being created; or

(iv) the establishment or development of commercial activities in India is prejudiced; or

(b) if, by reason of conditions imposed by the patentee (whether before or after the commencement of this Act) upon the grant of licences under the patent, or upon the purchase, hire or use of the patented article or process, the manufacture, use or sale of materials not protected by the patent, or the establishment or development of any trade or industry in India, is prejudiced; or

(c) if the patented invention is not being worked in India on a commercial scale to an adequate extent or is not being worked to the fullest extent that is reasonably practicable; or

(d) if the demand for the patented article in India is being met to a substantial extent by importation from abroad by—

(i) the patentee or persons claiming under him; or

(ii) persons directly or indirectly purchasing from him; or

(iii) other persons against whom the patentee is not taking or has not taken proceedings for infringement; or

(e) if the working of the patented invention in India on a commercial scale is being prevented or hindered by the importation from abroad of the patented article by the patentee or the other persons referred to in the preceding clause.

91. (1) Where an application under section 84, section 86 or section 89, as the case may be, is made on the ground mentioned in clause (c) of section 90 and the Controller is satisfied that the time which has elapsed since the sealing of the patent has for any reason been insufficient to enable the invention to be worked on a commercial scale to an adequate extent or to enable the invention to be so worked to the fullest extent that is reasonably practicable, he may, by order, adjourn the further hearing of the application for such period not exceeding twelve months in the aggregate as appears to him to be sufficient for the invention to be so worked:

Power of Controller to adjourn applications for compulsory licences, etc., in certain cases.

Provided that in any case where the patentee establishes that the reason why a patented invention could not be worked as aforesaid before the date of the application was due to any State or Central Act or any rule or regulation made thereunder or any order of the Government imposed otherwise than by way of a condition for the working of the invention in India or for the disposal of the patented articles or of the articles made by the process or by the use of the patented plant, machinery, or apparatus, then, the period of adjournment ordered under this sub-section shall be reckoned from the date on which the period during which the working of the invention was prevented by such Act, rule or regulation or order of Government as computed from the date of the application, expires.

(2) No adjournment under sub-section (1) shall be ordered unless the Controller is satisfied that the patentee has taken with promptitude adequate or reasonable steps to start the working of the invention in India on a commercial scale and to an adequate extent.

* * * * *

92. (1) Where the Controller is satisfied, upon consideration of an application under section 84, section 86 or section 89, that a *prima facie* case has been made out for the making of an order, he shall direct the applicant to serve copies of the application upon the patentee and any other person appearing from the register to be interested in the patent in respect of which the application is made, and shall advertise the application in the Official Gazette.

Procedure for dealing with applications under sections 84, 86 and 89.

(2) The patentee or any other person desiring to oppose the application may, within such time as may be prescribed or within such further time as the Controller may on application (made either before or after the expiration of the prescribed time) allow, give to the Controller notice of opposition.

(3) Any such notice of opposition shall contain a statement setting out the grounds on which the application is opposed.

(4) Where any such notice of opposition is duly given, the Controller shall notify the applicant, and shall give to the applicant and the opponent an opportunity to be heard before deciding the case.

Powers of
Controller
in granting
compulsory
licences.

93. (1) Where the Controller is satisfied on application made under section 84 that the manufacture, use or sale of materials not protected by the patent is prejudiced by reason of conditions imposed by the patentee upon the grant of licences under the patent, or upon the purchase, hire or use of the patented article or process, he may, 5 subject to the provisions of that section, order the grant of licences under the patent to such customers of the applicant as he thinks fit as well as to the applicant.

(2) Where an application under section 84 is made by a person being the holder of a licence under the patent, the Controller may, 10 if he makes an order for the grant of a licence to the applicant, order the existing licence to be cancelled, or may, if he thinks fit, instead of making an order for the grant of a licence to the applicant, order the existing licence to be amended.

(3) Where on an application made under section 84, the Control- 15 ler orders the grant of a licence, he may direct that the licence shall operate—

(a) to deprive the patentee of any right which he may have as patentee to make, use, exercise or vend the invention or to grant licences under the patent; 20

(b) to revoke all existing licences in respect of the invention.

(4) Where two or more patents are held by the same patentee and an applicant for a compulsory licence establishes that the reasonable requirements of the public have not been satisfied with respect to 25 some only of the said patents, then, if the Controller is satisfied that the applicant cannot efficiently or satisfactorily work the licence granted to him under those patents without infringing the other patents held by the patentee, he may, by order, direct the grant of a licence in respect of the other patents also to enable the licensee to 30 work the patent or patents in regard to which a licence is granted under section 84.

(5) Where the terms and conditions of a licence have been settled by the Controller, an application may be made to the Controller by the licensee for the revision of the terms on the ground that the 35 terms settled have proved to be more onerous than originally expected and that in consequence thereof the licensee is unable to work the invention except at a loss:

Provided that no such application shall be entertained,—

(a) unless the licensee has worked the invention on a com- 40 mercial scale for a period of at least twelve months, or

(b) a second time.

(6) The decision of the Controller shall be subject to appeal to the High Court.

94. The powers of the Controller upon an application made under section 84 shall be exercised with a view to securing the following 5 general purposes, that is to say,—

General purposes for granting compulsory licences.

(a) that patented inventions are worked on a commercial scale in India without undue delay and to the fullest extent that is reasonably practicable;

10 (b) that the interests of any person for the time being working or developing an invention in India under the protection of a patent are not unfairly prejudiced.

95. (1) In settling the terms and conditions of a licence under section 84, the Controller shall endeavour to secure—

Terms and conditions of compulsory licences.

15 (i) that the royalty and other remuneration, if any, reserved to the patentee or other person beneficially entitled to the patent, is reasonable, having regard to the nature of the invention, the expenditure incurred by the patentee in making the invention or in developing it and obtaining a patent and keeping it in force and other relevant factors;

20 (ii) that the patented invention is worked to the fullest extent by the person to whom the licence is granted and with reasonable profit to him;

(iii) that the patented articles are made available to the public at reasonable prices.

25 (2) No licence granted by the Controller shall authorise the licensee to import the patented article or an article or substance made by a patented process from abroad where such importation would, but for such authorisation, constitute an infringement of the rights of the patentee.

30 (3) Notwithstanding anything contained in sub-section (2), the Central Government may, if in its opinion it is necessary so to do in the public interest, direct the Controller at any time to authorise any licensee in respect of a patent to import the patented article or an article or substance made by a patented process from abroad 35 (subject to such conditions as it considers necessary to impose relating among other matters to the royalty and other remuneration, if any, payable to the patentee, the quantum of import, the sale price of the imported article, and the period of importation), and thereupon the Controller shall give effect to the directions.

40 96. (1) Notwithstanding anything contained in the other provisions of this Chapter, at any time after the sealing of a patent, any person who has the right to work any other patented invention either

Licensing of related patents.

as patentee or as licensee thereof, exclusive or otherwise, may apply to the Controller for the grant of a licence of the first mentioned patent on the ground that he is prevented or hindered without such licence from working the other invention efficiently or to the best advantage possible.

5

(2) No order under sub-section (1) shall be made unless the Controller is satisfied—

(i) that the applicant is able and willing to grant, or procure the grant to the patentee and his licensees if they so desire, of, a licence in respect of the other invention on reasonable terms; and

10

(ii) that the other invention has made a substantial contribution to the establishment or development of commercial or industrial activities in India.

(3) When the Controller is satisfied that the conditions mentioned in sub-section (1) have been established by the applicant, he may make an order on such terms as he thinks fit granting a licence under the first mentioned patent and a similar order under the other patent if so requested by the proprietor of the first mentioned patent or his licensee.

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(4) The provisions of sections 92 and 110 shall apply to licences granted under this section as they apply to licences granted under section 84.

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* * * * *

Special provision for compulsory licences on notification by Central Government.

97. (1) If the Central Government is satisfied in respect of any patent or class of patents in force that it is necessary or expedient in the public interest that compulsory licences should be granted at any time after the sealing thereof to work the invention or inventions, it may make a declaration to that effect in the Official Gazette, and thereupon the following provisions shall have effect, that is to say—

25

(i) the Controller shall on application made at any time after the notification by any person interested grant to the applicant a licence under the patent on such terms as he thinks fit;

30

(ii) in settling the terms of a licence granted under this section, the Controller shall endeavour to secure that the articles manufactured under the patent shall be available to the public at the lowest prices consistent with the patentees deriving a reasonable advantage from their patent rights.

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(2) The provisions of sections 92, 93, 94 and 95 shall apply in relation to the grant of licences under this section as they apply in relation to the grant of licences under section 84.

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* * * * *

98. Any order for the grant of a licence under this Chapter shall operate as if it were a deed granting a licence executed by the patentee and all other necessary parties embodying the terms and conditions, if any, settled by the Controller.

Order for licence to operate as a deed between parties concerned.

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CHAPTER XVII

USE OF INVENTIONS FOR PURPOSES OF GOVERNMENT AND ACQUISITION OF INVENTIONS BY CENTRAL GOVERNMENT

99. (1) For the purposes of this Chapter, an invention is said to be used for the purposes of Government if it is made, used, exercised or vended for the purposes of the Central Government, a State Government or a Government undertaking or any other undertaking in a class or classes of industries which the Central Government, having regard to the interests of the general public, may notify in this behalf in the Official Gazette.

Meaning of use of invention for purposes of Government.

15 (2) Nothing contained in this Chapter shall apply in the case of any such use of an invention as is deemed not to constitute an infringement of the patentee's rights under section 48. * *

100. (1) Notwithstanding anything contained in this Act, at any time after an application for a patent has been filed at the patent office or a patent has been granted, the Central Government and any person authorised in writing by it, may make, use, exercise or vend the invention for the purposes of Government in accordance with the provisions of this Chapter.

Power of Central Government to use inventions for purposes of Government.

25 (2) Where an invention has, before the priority date of the relevant claim of the complete specification, been duly recorded in a document, or tested or tried, by or on behalf of the Government or a Government undertaking, otherwise than in consequence of the communication of the invention directly or indirectly by the patentee or by a person from whom he derives title, any use of the invention by the Central Government or any person authorised in writing by it for the purposes of Government may be made free of any royalty or other remuneration to the patentee.

35 (3) If and so far as the invention has not been so recorded or tried or tested as aforesaid, any use of the invention made by the Central Government or any person authorised by it under sub-section (1), at any time after the acceptance of the complete specification in respect of the patent or in consequence of any such communication as aforesaid, shall be made upon terms as may be agreed upon either

before or after the use, between the Central Government or any person authorised under sub-section (1) and the patentee, or, as may in default of agreement be determined by the High Court on a reference under section 103.

(4) The authorisation by the Central Government in respect of an invention may be given under this section, either before or after the patent is granted and either before or after the acts in respect of which such authorisation is given or done, and may be given to any person, whether or not he is authorised directly or indirectly by the applicant or the patentee to make, use, exercise or vend the invention.

(5) Where an invention has been made, used, exercised or vended by or with the authority of the Central Government for the purposes of Government under this section, then, unless it appears to the Government that it would be contrary to the public interest so to do, the Government shall notify the patentee as soon as practicable of the fact and furnish him with such information as to the extent of the making, use, exercise or vending of the invention as he may, from time to time, reasonably require; and where the invention has been made, used, exercised or vended for the purposes of a Government undertaking or an undertaking in a class or classes of industries notified by the Central Government under section 99, the Central Government may call for such information as may be necessary for this purpose from such undertaking.

(6) The right to make, use, exercise and vend an invention for the purposes of Government under sub-section (1) shall include the right to sell the goods which have been made in exercise of that right, and a purchaser of goods so sold, and a person claiming through him, shall have the power to deal with the goods as if the Central Government or the person authorised under sub-section (1) were the patentee of the invention.

(7) Where in respect of a patent which has been the subject of an authorisation under this section, there is an exclusive licensee as is referred to in sub-section (3) of section 101, or where such patent has been assigned to the patentee in consideration of royalties or other benefits determined by reference to the use of the invention (including payments by way of minimum royalty), the notice directed to be given under sub-section (5) shall also be given to such exclusive licensee or assignor, as the case may be, and the reference to the patentee in sub-section (3) shall be deemed to include a reference to such assignor or exclusive licensee.

101. (1) In relation to any use of a patented invention, or an invention in respect of which an application for a patent is pending, made for the purposes of Government—

Rights of third parties in respect of use of invention for purposes of Government.

5 (a) by the Central Government or any person authorised by the Central Government under section 100; or

(b) by the patentee or applicant for the patent to the order made by the Central Government,

10 the provisions of any licence, assignment or agreement granted or made, whether before or after the commencement of this Act, between the patentee or applicant for the patent (or any person who derives title from him or from whom he derives title) and any person other than the Central Government shall be of no effect so far as those provisions—

15 (i) restrict or regulate the use for the purposes of Government of the invention, or of any model, document or information relating thereto, or

20 (ii) provide for the making of payments in respect of any use of the invention or of the model, document or information relating thereto for the purposes of Government (including payments by way of minimum royalty);

and the reproduction or publication of any model or document in connection with the said use for the purposes of Government shall not be deemed to be an infringement of any copyright subsisting in the model or document.

25 (2) Where the patent, or the right to apply for or obtain the patent, has been assigned to the patentee in consideration of royalties or other benefits determined by reference to the use of the invention (including payments by way of minimum royalty), then, in relation to any use of the invention made for the purposes of Government by the patentee to the order of the Central Government, sub-section (3) of section 100 shall have effect as if that use were made by virtue of an authority given under that section; and any use of the invention for the purposes of Government by virtue of sub-section (3) of that section shall have effect as if the reference 35 to the patentee included a reference to the assignor of the patent, and any sum payable by virtue of that sub-section shall be divided between the patentee and the assignor in such proportion as may be agreed upon between them or as may in default of agreement be determined by the High Court on a reference under section 103.

40 (3) Where by virtue of sub-section (3) of section 100, payments are required to be made by the Central Government or persons authorised under sub-section (1) of that section in respect of the use of an invention for the purposes of Government and where in

respect of such patent there is an exclusive licensee authorised under his licence to use the invention for the purposes of Government, such sum shall be shared by the patentee and such licensee in such proportions, if any, as may be agreed upon between them or as may in default of agreement be determined by the High Court on a reference under section 103 to be just, having regard to any expenditure incurred by the licensee—

(a) in developing the said invention; or

(b) in making payments to the patentees other than royalties or other benefits determined by reference to the use of the invention, including payments by way of minimum royalty in consideration of the licence.

acquisition of inventions and patents by the Central Government.

102. (1) The Central Government may, if satisfied that it is necessary that an invention which is the subject of an application for a patent or a patent should be acquired from the applicant or the patentee for a public purpose, publish a notification to that effect in the Official Gazette, and thereupon the invention or patent and all rights in respect of the invention or patent shall, by force of this section, stand transferred to and be vested in the Central Government. 20

(2) Notice of the acquisition shall be given to the applicant, and, where a patent has been granted, to the patentee and other persons, if any, appearing in the register as having an interest in the patent.

(3) The Central Government shall pay to the applicant, or, as the case may be, the patentee and other persons appearing on the register as having an interest in the patent such compensation as may be agreed upon between the Central Government and the applicant, or the patentee and other persons; or, as may, in default of agreement, be determined by the High Court on a reference under section 103 to be just having regard to the expenditure incurred in connection with the invention and, in the case of a patent, the term thereof, the period during which and the manner in which it has already been worked (including the profits made during such period by the patentee or by his licensee whether exclusive or otherwise) and other relevant factors. 35

reference to High Court of disputes as to use or purposes of Government.

103. (1) Any dispute as to the exercise by the Central Government or a person authorised by it of the powers conferred by section 100, or as to terms for the use of an invention for the purposes of Government thereunder or as to the right of any person to receive any part of a payment made in pursuance of sub-section (3) of that section or as to the amount of compensation payable for the acquisition of an invention or a patent under section 102, may be 40

referred to the High Court by either party to the dispute in such manner as may be prescribed by the rules of the High Court.

(2) In any proceedings under this section to which the Central Government is a party, the Central Government may,—

5 (a) if the patentee is a party to the proceedings, petition by way of counter-claim for revocation of the patent on any ground upon which a patent may be revoked under section 64; and

10 (b) whether a patentee is or is not a party to the proceedings, put in issue the validity of the patent without petitioning for its revocation.

(3) If in such proceedings as aforesaid any question arises whether an invention has been recorded, tested or tried as is mentioned in section 100, and the disclosure of any document regarding the
15 invention, or of any evidence of the test or trial thereof, would, in the opinion of the Central Government, be prejudicial to the public interest, the disclosure may be made confidentially to the advocate of the other party or to an independent expert mutually agreed upon.

20 (4) In determining under this section any dispute between the Central Government and any person as to terms for the use of an invention for the purposes of Government, the High Court shall have regard to any benefit or compensation which that person or any person from whom he derives title, may have received, or may
25 be entitled to receive, directly or indirectly in respect of the use of the invention in question for the purposes of Government.

(5) In any proceedings under this section, the High Court may at any time order the whole proceedings or any question or issue of fact arising therein to be referred to an official referee, commis-
30 sioner or an arbitrator on such terms as the High Court may direct, and references to the High Court in the foregoing provisions of this section shall be construed accordingly.

(6) Where the invention claimed in a patent was made by a person who at the time it was made was in the service of the Central
35 Government or of a State Government or was an employee of a Government undertaking and the subject-matter of the invention is certified by the relevant Government or the principal officer of the Government undertaking to be connected with the work done in the course of the normal duties of the Government servant or employee

of the Government undertaking, then, notwithstanding anything contained in this section, any dispute of the nature referred to in subsection (1) relating to the invention shall be disposed of by the Central Government conformably to the provisions of this section so far as may be applicable, but before doing so the Central Government shall give an opportunity to the patentee and such other parties as it considers have an interest in the matter to be heard. 5

CHAPTER XVIII

SUITS CONCERNING INFRINGEMENT OF PATENTS

Jurisdiction.

104. No suit for a declaration under section 105 or for any relief under section 106 or for infringement of a patent shall be instituted in any court inferior to a district court having jurisdiction to try the suit: 10

Provided that where a counter-claim for revocation of the patent is made by the defendant, the suit, along with the counter-claim, shall be transferred to the High Court for decision. 15

Power of court to make declaration as to non-infringement.

105. (1) Notwithstanding anything contained in section 34 of the Specific Relief Act, 1963, any person may institute a suit for a declaration that the use by him of any process, or the making, use or sale of any article by him, does not, or would not, constitute an infringement of a claim of a patent against the patentee or the holder of an exclusive licence under the patent, notwithstanding that no assertion to the contrary has been made by the patentee or the licensee, if it is shown— 4

(a) that the plaintiff has applied in writing to the patentee or exclusive licensee for a written acknowledgment to the effect of the declaration claimed and has furnished him with full particulars in writing of the process or article in question; and 25

(b) that the patentee or licensee has refused or neglected to give such an acknowledgment. 30

(2) The costs of all parties in a suit for a declaration brought by virtue of this section shall, unless for special reasons the court thinks fit to order otherwise, be paid by the plaintiff.

(3) The validity of a claim of the specification of a patent shall not be called in question in a suit for a declaration brought by virtue of this section, and accordingly the making or refusal of such a declaration in the case of a patent shall not be deemed to imply that the patent is valid or invalid. 35

(4) A suit for a declaration may be brought by virtue of this section at any time after the date of advertisement of acceptance of the complete specification of a patent, and references in this section to the patentee shall be construed accordingly. 40

106. (1) Where any person (whether entitled to or interested in a patent or an application for a patent or not) threatens any other person by circulars or advertisements or by communications, oral or in writing, addressed to that or any other person, with proceedings for infringement of a patent, any person aggrieved thereby may bring a suit against him praying for the following reliefs, that is to say—

Power of Court to grant relief in cases of groundless threats of infringement proceedings.

(a) a declaration to the effect that the threats are unjustifiable;

(b) an injunction against the continuance of the threats; and

10 (c) such damages, if any, as he has sustained thereby.

(2) Unless in such suit the defendant proves that the acts in respect of which the proceedings were threatened constitute or, if done, would constitute, an infringement of a patent or of rights arising from the publication of a complete specification in respect of a claim of the specification not shown by the plaintiff to be invalid, the court may grant to the plaintiff all or any of the reliefs prayed for.

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Explanation.—A mere notification of the existence of a patent does not constitute a threat of proceeding within the meaning of this section.

20 107. (1) In any suit for infringement of a patent, every ground on which it may be revoked under section 64 shall be available as a ground for defence.

Defences, etc., in suits for infringement.

(2) In a suit for infringement of a patent granted in respect of a method or process of manufacture of a substance referred to in section 5, any substance of the same chemical composition or constitution as the first mentioned substance shall be presumed, unless the contrary is proved, to have been made by the aforesaid patented method or process.

30 108. The reliefs which a court may grant in any suit for infringement include an injunction (subject to such terms, if any, as the court thinks fit) and, at the option of the plaintiff, either damages or an account of profits.

Reliefs in suits for infringement.

35 109. (1) The holder of an exclusive licence shall have the like right as the patentee to institute a suit in respect of any infringement of the patent committed after the date of the licence, and in awarding damages or an account of profits or granting any other relief in any such suit the court shall take into consideration any loss suffered or likely to be suffered by the exclusive licensee as such or, as the case may be, the profits earned by means of the infringement so far as it constitutes an infringement of the rights of the exclusive licensee as such.

Right of exclusive licensee to take proceedings against infringement.

(2) In any suit for infringement of a patent by the holder of an exclusive licence under sub-section (1), the patentee shall, unless he has joined as a plaintiff in the suit, be added as a defendant, but a patentee so added as defendant shall not be liable for any costs unless he enters an appearance and takes part in the proceedings.

Right of licensee under section 84 to take proceedings against infringement.

110. Any person to whom a licence has been granted under section 84 shall be entitled to call upon the patentee to take proceedings to prevent any infringement of the patent, and, if the patentee refuses or neglects to do so within two months after being so called upon, the licensee may institute proceedings for the infringement in his own name as though he were the patentee, making the patentee a defendant; but a patentee so added as defendant shall not be liable for any costs unless he enters an appearance and takes part in the proceedings.

Restriction on power of court to grant damages or account of profits for infringement.

111. (1) In a suit for infringement of a patent damages or an account of profits shall not be granted against the defendant who proves that at the date of the infringement he was not aware and had no reasonable grounds for believing that the patent existed.

Explanation.—A person shall not be deemed to have been aware or to have had reasonable grounds for believing that a patent exists by reason only of the application to an article of the word 'Patent', 'Patented' or any word or words expressing or implying that a patent has been obtained for the article, unless the number of the patent accompanies the word or words in question.

(2) In any suit for infringement of a patent the court may, if it thinks fit, refuse to grant any damages or an account of profits in respect of any infringement committed after a failure to pay any renewal fee within the prescribed period and before any extension of that period.

(3) Where an amendment of a specification by way of disclaimer, correction or explanation has been allowed under this Act after the publication of the specification, no damages or account of profits shall be granted in any proceeding in respect of the use of the invention before the date of the decision allowing the amendment, unless the court is satisfied that the specification as originally published was framed in good faith and with reasonable skill and knowledge.

(4) Nothing in this section shall affect the power of the court to grant an injunction in any suit for infringement of a patent.

Restriction on power of court

112. If in proceedings for the infringement of a patent endorsed or deemed to be endorsed with the words "Licences of right" (otherwise than by the importation of the patented article from other countries) the infringing defendant is ready and willing to take a licence upon

terms to be settled by the Controller as provided in section 88, no injunction shall be granted against him, and the amount (if any) recoverable against him by way of damages shall not exceed double the amount which would have been recoverable against him as licensee if such a licence had been granted before the earliest infringement.

to grant injunction in certain cases.

113. (1) If in any proceedings before a High Court for the revocation of a patent under section 64 the validity of any claim of a specification is contested and that claim is found by the court to be valid, the Court may certify that the validity of that claim was contested in those proceedings and was upheld.

Certificate of validity of specification and costs of subsequent suits for infringement thereof.

(2) Where any such certificate has been granted, then, if in any subsequent suit before a court for infringement of that claim of the patent or in any subsequent proceeding for revocation of the patent in so far as it relates to that claim, the patentee or other person relying on the validity of the claim obtains a final order or judgment in his favour, he shall be entitled to an order for the payment of his full costs, charges and expenses of and incidental to any such suit or proceeding properly incurred so far as they concern the claim in respect of which the certificate was granted, unless the court trying the suit or proceeding otherwise directs:

Provided that the costs as specified in this sub-section shall not be ordered when the party disputing the validity of the claim satisfies the court that he was not aware of the grant of the certificate when he raised the dispute and withdrew forthwith such defence when he became aware of such a certificate.

(3) Nothing contained in this section shall be construed as authorising courts hearing appeals from decrees or orders in suits for infringement or petitions for revocation to pass orders for costs on the scale referred to therein.

114. (1) If in proceedings for infringement of a patent it is found that any claim of the specification, being a claim in respect of which infringement is alleged, is valid, but that any other claim is invalid, the court may grant relief in respect of any valid claim which is infringed:

Relief for infringement of partially valid specification.

Provided that the court shall not grant relief except by way of injunction save in the circumstances mentioned in sub-section (2).

(2) Where the plaintiff proves that the invalid claim was framed in good faith and with reasonable skill and knowledge, the court shall grant relief in respect of any valid claim which is infringed subject to the discretion of the court as to costs and as to the date from which damages or an account of profits should be reckoned, and in exercising such discretion the court may take into consideration the conduct of the parties in inserting such invalid claims in the specification or permitting them to remain there.

Scientific
advisers.

115. (1) In any suit for infringement or in any proceeding before a court under this Act, the court may at any time, and whether or not an application has been made by any party for that purpose, appoint an independent scientific adviser to assist the court or to inquire and report upon any such question of fact or of opinion (not involving a question of interpretation of law) as it may formulate for the purpose.

(2) The remuneration of the scientific adviser shall be fixed by the court and shall include the costs of making a report and a proper daily fee for any day on which the scientific adviser may be required to attend before the court, and such remuneration shall be defrayed out of moneys provided by Parliament by law for the purpose.

CHAPTER XIX

APPEALS

Appeals.

116. (1) No appeal shall lie from any decision, order or direction made or issued under this Act by the Central Government, or from any act or order of the Controller for the purpose of giving effect to any such decision, order or direction.

(2) Save as otherwise expressly provided in sub-section (1), an appeal shall lie to a High Court from any decision, order or direction of the Controller under any of the following provisions, that is to say,

section 15, section 16, section 17, section 18, section 19, section 20, section 25, section 27, section 28, section 51, section 54, section 57, section 60, section 61, section 63, sub-section (3) of section 69, section 78, section 84, section 86, section 89, section 93, section 96 and section 97.

(3) Every appeal under this section shall be in writing and shall be made within three months from the date of the decision, order or direction, as the case may be, of the Controller, or within such further time as the High Court may in accordance with the rules made by it under section 158 allow.

117. (1) Every appeal before a High Court under section 116 shall be by petition and shall be in such form and shall contain such particulars as may be prescribed by rules made by the High Court under section 158. Procedure for hearing of appeals.

5 (2) Every such appeal shall be heard by a single Judge of the High Court:

Provided that any such Judge may, if he so thinks fit, refer the appeal at any stage of the proceeding to a Bench of the High Court.

(3) Every such appeal shall be heard as expeditiously as possible and endeavour shall be made to decide the appeal within a period of twelve months from the date on which it is filed.

CHAPTER XX

PENALTIES

15 118. If any person fails to comply with any direction given under section 35 or makes or causes to be made an application for the grant of a patent in contravention of section 39, he shall be punishable with imprisonment for a term which may extend to two years, or with fine, or with both. Contravention of secrecy provision relating to certain inventions

20 119. If any person makes, or causes to be made, a false entry in any register kept under this Act, or a writing falsely purporting to be a copy of an entry in such a register, or produces or tenders, or causes to be produced or tendered, in evidence any such writing knowing the entry or writing to be false, he shall be punishable with imprisonment for a term which may extend to two years, or with fine, or with both. Falsification of entries in register, etc.

120. If any person falsely represents that any article sold by him is patented in India or is the subject of an application for a patent in India, he shall be punishable with fine which may extend to five hundred rupees. Unauthorized disclosure of patent rights.

30 *Explanation 1.*—For the purposes of this section, a person shall be deemed to represent—

(a) that an article is patented in India if there is stamped, engraved or impressed on, or otherwise applied to, the article the word “patent” or “patented” or some other word expressing or implying that a patent for the article has been obtained in India;

35 (b) that an article is the subject of an application for a patent in India, if there are stamped, engraved or impressed on, or otherwise applied to, the article the words “patent applied for”, “patent pending”, or some other words implying that an application for a patent for the article has been made in India.

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Explanation 2.—The use of words “patent”, “patented”, “patent applied for”, “patent pending” or other words expressing or implying that an article is patented or that a patent has been applied for shall be deemed to refer to a patent in force in India, or to a pending application for a patent in India, as the case may be, unless there is an accompanying indication that the patent has been obtained or applied for in any country outside India.

Wrongful
use of
words
“patent
office”.

121. If any person uses on his place of business or any document issued by him or otherwise the words “patent office” or any other words which would reasonably lead to the belief that his place of business is, or is officially connected with, the patent office, he shall be punishable with imprisonment for a term which may extend to six months, or with fine, or with both.

Refusal or
failure to
supply
informa-
tion

122. (1) If any person refuses or fails to furnish—

(a) to the Central Government any information which he is required to furnish under sub-section (5) of section 100,

(b) to the Controller any information or statement which he is required to furnish under section 146,

he shall be punishable with fine which may extend to one thousand rupees.

(2) If any person, being required to furnish any such information as is referred to in sub-section (1), furnishes information or statement which is false, and which he either knows or has reason to believe to be false or does not believe to be true, he shall be punishable with imprisonment which may extend to six months, or with fine, or with both.

Offence
non-
registered
tent
ents.

123. If any person contravenes the provisions of section 129, he shall be punishable with fine which may extend to five hundred rupees in the case of a first offence and two thousand rupees in the case of a second or subsequent offence.

Offences
com-
panies.

124. (1) If the person committing an offence under this Act is a company, the company as well as every person in charge of, and responsible to, the company for the conduct of its business at the time of the commission of the offence shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or that the commission of the offence is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

10 *Explanation.*—For the purposes of this section,—

(a) “company” means any body corporate and includes a firm or other association of individuals; and

(b) “director”, in relation to a firm, means a partner in the firm.

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CHAPTER XXI

PATENT AGENTS

20

125. The Controller shall maintain a register to be called the register of patent agents in which shall be entered the names and addresses of all persons qualified to have their names so entered under section 126. Register of patent agents.

126. (1) A person shall be qualified to have his name entered in the register of patent agents if he fulfils the following conditions, namely,— Qualifications for registration as patent agents.

(a) he is a citizen of India; **

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(b) he has completed the age of 21 years;

(c) he has obtained a degree ** from any University in the territory of India or possesses such other equivalent ** qualifications as the Central Government may specify in this behalf, and, in addition,—

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(i) is an advocate within the meaning of the Advocates Act, 1961; or

(ii) has passed the qualifying examination prescribed for the purpose; **

(d) he has paid such fee as may be prescribed.

(2) Notwithstanding anything contained in sub-section (1), a person who has been practising as a patent agent before the 1st day of November, 1966 and has filed not less than five complete specifications before the said day, shall, on payment of prescribed fee, be qualified to have his name entered in the register of patent agents.

Rights of
patent
agents.

127. Subject to the provisions contained in this Act and in any rules made thereunder, every patent agent whose name is entered in the register shall be entitled—

(a) to practise before the Controller; and

(b) to prepare all documents, transact all business and discharge such other functions as may be prescribed in connection with any proceeding before the Controller under this Act.

Subscrip-
tion and
verifica-
tion of
certain
documents
by patent
agents.

128. (1) Subject to the provisions contained in sub-section (2) and to any rules made under this Act, all applications and communications to the Controller under this Act may be signed by a patent agent authorised in writing in this behalf by the person concerned.

(2) The following documents, namely,—

(i) applications for patents;

(ii) applications for the restoration of lapsed patents;

(iii) applications for the sealing of patents after the time allowed for that purpose by or under sub-section (2), or sub-section (3) of section 43 has expired;

(iv) applications for leave to amend;

(v) applications for compulsory licences or for revocation;
and

(vi) notices of surrender of patents;

shall be signed and verified in the manner prescribed by the person making such applications or giving such notices:

Provided that if such person is absent from India, they may be signed and verified on his behalf by a patent agent authorised by him in writing in that behalf.

129. (1) No person, either alone or in partnership with any other person, shall practise, describe or hold himself out as a patent agent, or permit himself to be so described or held out, unless he is registered as a patent agent or, as the case may be, unless he and all his partners are so registered.

Restrictions on practice as patent agents.

(2) No company or other body corporate shall practise, describe itself or hold itself out as patent agents or permit itself to be so described or held out.

Explanation.—For the purposes of this section, practise as a patent agent includes any of the following acts, namely:—

- (a) applying for or obtaining patents in India or elsewhere;
- (b) preparing specifications or other documents for the purposes of this Act or of the patent law of any other country;
- (c) giving advice other than of a scientific or technical nature as to the validity of patents or their infringement.

130. (1) The Central Government may remove the name of any person from the register when it is satisfied, after giving that person a reasonable opportunity of being heard and after such further inquiry, if any, as it thinks fit to make—

Removal from register of patent agents and restoration.

(i) that his name has been entered in the register by error or on account of misrepresentation or suppression of material fact;

(ii) that he has been convicted of any offence and sentenced to a term of imprisonment or has been guilty of misconduct in his professional capacity which in the opinion of the Central Government renders him unfit to be kept in the register.

(2) The Central Government may, on application and on sufficient cause being shown, restore to the register the name of any person removed therefrom.

131. (1) Subject to any rules made in this behalf, the Controller may refuse to recognise as agent in respect of any business under this Act—

Power of Controller to refuse to deal with certain agents.

(a) any individual whose name has been removed from, and not restored to, the register; ***

(b) any person who has been convicted of an offence under section 123;

(c) any person, not being registered as a patent agent, who in the opinion of the Controller is engaged wholly or mainly in acting as agent in applying for patents in India or elsewhere in the name or for the benefit of the person by whom he is employed;

(d) any company or firm, if any person whom the Controller could refuse to recognise as agent in respect of any business under this Act, is acting as a director or manager of the company or is a partner in the firm.

(2) The Controller shall refuse to recognise as agent in respect of any business under this Act any person who neither resides nor has a place of business in India.

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agents.

132. Nothing in this Chapter shall be deemed to prohibit—

(a) the applicant for a patent or any person, not being a patent agent, who is duly authorised by the applicant from drafting any specification or appearing or acting before the Controller;

(b) an advocate, not being a patent agent, from taking part in any proceedings under this Act otherwise than by way of drafting any specification.

CHAPTER XXII

INTERNATIONAL ARRANGEMENTS

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untries.

133. (1) With a view to the fulfilment of a treaty, convention or arrangement with any country outside India which affords to applicants for patents in India or to citizens of India similar privileges as are granted to its own citizens in respect of the grant of patents and the protection of patent rights, the Central Government may, by notification in the Official Gazette, declare such country to be a convention country for the purposes of this Act.

(2) A declaration under sub-section (1) may be made for the purposes either of all or of some only of the provisions of this Act, and a country in the case of which a declaration made for the purposes of some only of the provisions of this Act is in force shall be deemed to be a convention country for the purposes of those provisions only.

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134. Where any country specified by the Central Government in this behalf by notification in the Official Gazette does not accord to citizens of India the same rights in respect of the grant of patents and the protection of patent rights as it accords to its own nationals, no

national of such country shall be entitled, either solely or jointly with any other person,—

(a) to apply for the grant of a patent or be registered as the proprietor of a patent;

5 (b) to be registered as the assignee of the proprietor of a patent; or

(c) to apply for a licence or hold any licence under a patent granted under this Act.

10 135. (1) Without prejudice to the provisions contained in section 6, where a person has made an application for a patent in respect of an invention in a convention country (hereinafter referred to as the "basic application"), and that person or the legal representative or assignee of that person makes an application under this Act for a patent within twelve months after the date on which the basic application was made, the priority date of a claim of the complete specification, being a claim based on matter disclosed in the basic application, is the date of making of the basic application. Conven-
tion appli-
cations.

15 *Explanation.*—Where applications have been made for similar protection in respect of an invention in two or more convention countries, the period of twelve months referred to in this sub-section shall be reckoned from the date on which the earlier or earliest of the said applications was made.

20 (2) Where applications for protection have been made in one or more convention countries in respect of two or more inventions which are cognate or of which one is a modification of another, a single convention application may, subject to the provisions contained in section 10, be made in respect of those inventions at any time within twelve months from the date of the earliest of the said applications for protection:

30 Provided that the fee payable on the making of any such application shall be the same as if separate applications have been made in respect of each of the said inventions, and the requirements of clause (b) of sub-section (1) of section 136 shall, in the case of any such application, apply separately to the applications for protection in respect of each of the said inventions.

35 136. (1) Every convention application shall—

(a) be accompanied by a complete specification; and

(b) specify the date on which and the convention country in which the application for protection, or, as the case may be, the first of such applications was made; and Special
provisions
relating to
convention
applica-
tions.

40 (c) state that no application for protection in respect of the invention had been made in a convention country before that

date by the applicant or by any person from whom he derives title.

(2) Subject to the provisions contained in section 10, a complete specification filed with a convention application may include claims in respect of developments of, or additions to, the invention in respect of which the application for protection was made in a convention country, being developments or additions in respect of which the applicant would be entitled under the provisions of section 6 to make a separate application for a patent.

(3) A convention application shall not be post-dated under sub-section (1) of section 17 to a date later than the date on which under the provisions of this Act the application could have been made.

Multiple
priorities.

137. (1) Where two or more applications for patents in respect of inventions have been made in one or more convention countries and those inventions are so related as to constitute one invention, one application may be made by any or all of the persons referred to in sub-section (1) of section 135 within twelve months from the date on which the earlier or earliest of those applications was made, in respect of the inventions disclosed in the specifications which accompanied the basic applications.

20

(2) The priority date of a claim of the complete specification, being a claim based on matters disclosed in one or more of the basic applications, is the date on which that matter was first so disclosed.

(3) For the purposes of this Act, a matter shall be deemed to have been disclosed in a basic application for protection in a convention country if it was claimed or disclosed (otherwise than by way of disclaimer or acknowledgment of a prior act) in that application, or any documents submitted by the applicant for protection in support of and at the same time as that application, but no account shall be taken of any disclosure effected by any such document unless a copy of the document is filed at the patent office with the convention application or within such period as may be prescribed after the filing of that application.

Complementary
provisions
of convention
applications.

138. (1) Where a convention application is made in accordance with the provisions of this Chapter, the applicant shall furnish, in addition to the complete specification, copies of the specifications or corresponding documents filed or deposited by the applicant in the patent office of the convention country in which the basic application was made, certified by the official chief or head of the patent office of the convention country, or otherwise verified to the satisfaction of the Controller, along with the application or within three months thereafter, or within such further period as the Controller may on good cause allow

35

40

(2) If any such specification or other document is in a foreign language, a translation into English of the specification or document, verified by affidavit or otherwise to the satisfaction of the Controller, shall be annexed to the specification or document.

5 (3) For the purposes of this Act, the date on which an application was made in a convention country is such date as the Controller is satisfied, by certificate of the official chief or head of the patent office of the convention country or otherwise, is the date on which the application was made in that convention country.

10 139. Save as otherwise provided in this Chapter, all the provisions of this Act shall apply in relation to a convention application and a patent granted in pursuance thereof as they apply in relation to an ordinary application and a patent granted in pursuance thereof.

Other provisions of Act to apply to convention applications.

CHAPTER XXIII

15 MISCELLANEOUS

140. (1) It shall not be lawful to insert—

(i) in any contract for or in relation to the sale or lease of a patented article or an article made by a patented process; or

Avoidance of certain restrictive conditions.

(ii) in a licence to manufacture or use a patented article; or

20 (iii) in a licence to work any process protected by a patent, a condition the effect of which may be—

(a) to require the purchaser, lessee, or licensee to acquire from the vendor, lessor, or licensor, or his nominees, or to prohibit him from acquiring or to restrict in any manner or to any extent his right to acquire from any person or to prohibit him from acquiring except from the vendor, lessor, or licensor or his nominees, any article other than the patented article or an article other than that made by the patented process; or

25 (b) to prohibit the purchaser, lessee or licensee from using, or to restrict in any manner or to any extent the right of the purchaser, lessee or licensee, to use an article other than the patented article or an article other than that made by the patented process, which is not supplied by the vendor, lessor or licensor or his nominee; or

35 (c) to prohibit the purchaser, lessee or licensee from using or to restrict in any manner or to any extent the right of the

purchaser, lessee or licensee to use any process other than the patented process;

and any such condition shall be void.

(2) A condition of the nature referred to in clause (a) or clause (b) or clause (c) of sub-section (1) shall not cease to be a condition falling within that sub-section merely by reason of the fact that the agreement containing it has been entered into separately, whether before or after the contract relating to the sale, lease or licence of the patented article or process.

(3) In proceedings against any person for the infringement of a patent, it shall be a defence to prove that at the time of the infringement there was in force a contract relating to the patent and containing a condition declared unlawful by this section:

Provided that this sub-section shall not apply if the plaintiff is not a party to the contract and proves to the satisfaction of the court that the restrictive condition was inserted in the contract without his knowledge and consent, express or implied.

(4) Nothing in this section shall—

(a) affect a condition in a contract by which a person is prohibited from selling goods other than those of a particular person;

(b) validate a contract which, but for this section, would be invalid;

(c) affect a condition in a contract for the lease of, or licence to use, a patented article, by which the lessor or licensor reserves to himself or his nominee the right to supply such new parts of the patented article as may be required or to put or keep it in repair.

(5) The provisions of this section shall also apply to contracts made before the commencement of this Act if, and in so far as, any restrictive conditions declared unlawful by this section continue in force after the expiration of one year from such commencement.

Determi-
nation of
certain
contracts.

141. (1) Any contract for the sale or lease of a patented article or for licence to manufacture, use or work a patented article or process, or relating to any such sale, lease or licence, whether made before or after the commencement of this Act, may at any time after the patent or all the patents by which the article or process was

protected at the time of the making of the contract has or have
ceased to be in force, and notwithstanding anything to the contrary
in the contract or in any other contract, be determined by the pur-
chaser, lessee, or licensee, as the case may be, of the patent on giving
5 three months notice in writing to the other party.

(2) The provisions of this section shall be without prejudice to
any right of determining a contract exercisable apart from this
section.

142. (1) There shall be paid in respect of the grant of patents Fees.
10 and applications therefor, and in respect of other matters in relation
to the grant of patents under this Act, such fees as may be prescribed
by the Central Government.

(2) Where a fee is payable in respect of the doing of an act by
the Controller, the Controller shall not do that act until the fee has
15 been paid.

(3) Where a fee is payable in respect of the filing of a document
at the patent office, the document shall be deemed not to have been
filed at the office until the fee has been paid.

(4) Where a principal patent is granted later than two years
20 from the date of the application for patent, the fees which have
become due in the meantime may be paid within a term of three
months from the date of the recordal of the patent in the register.

143. Subject to the provisions of Chapter VII, an application
for a patent, and any specification filed in pursuance thereof, shall
25 not, except with the consent of the applicant, be published by the
Controller or be open to public inspection at any time before the
date of advertisement of acceptance of the application in pursuance
of section 23. Restrictions upon publication of specifications.

144. The reports of examiners to the Controller under this Act
30 shall not be open to public inspection or be published by the Con-
troller; and such reports shall not be liable to production or inspec-
tion in any legal proceeding unless the court certifies that the pro-
duction or inspection is desirable in the interests of justice, and ought
to be allowed. Reports of examiners to be confidential.

35 Provided that the Controller may, on application made in the
prescribed manner, by any person, disclose the result of any search
made under section 13 in respect of any application for a patent
where the complete specification has been published.

Publication of patented inventions. 145. The Controller shall issue periodically a publication of patented inventions containing such information as the Central Government may direct.

Power of Controller to call for information from patentees. 146. The Controller may, at any time during the continuance of the patent, by notice in writing, require a patentee or a licensee, 5 exclusive or otherwise, to furnish to him within two months from the date of such notice or within such further time as the Controller may allow, such information or such periodical statements as to the extent to which the patented invention has been commercially worked in India as may be specified in the notice. 10

Evidence of entries, documents, etc. 147. (1) A certificate purporting to be signed by the Controller as to any entry, matter or thing which he is authorised by this Act or any rules made thereunder to make or do, shall be *prima facie* evidence of the entry having been made and of the contents thereof and of the matter or thing having been done or omitted to be done. 15

(2) A copy of any entry in any register or of any document kept in the patent office or of any patent, or an extract from any such register or document, purporting to be certified by the Controller and sealed with the seal of the patent office shall be admitted in evidence in all courts, and in all proceedings, without further proof 20 or production of the original.

(3) The Controller or any other officer of the patent office shall not, in any legal proceedings to which he is not a party, be compellable to produce the register or any other document in his custody, the contents of which can be proved by the production of a certified 25 copy issued under this Act or to appear as a witness to prove the matters therein recorded unless by order of the court made for special causes. 30

Declaration by infant, lunatic, etc. 148. (1) If any person is, by reason of minority, lunacy or other disability, incapable of making any statement or doing anything re- 30 quired or permitted by or under this Act, the lawful guardian, committee or manager (if any) of the person subject to the disability, or if there be none, any person appointed by any court possessing jurisdiction in respect of his property, may make such statement or a statement as nearly corresponding thereto as circumstances permit, 35 and do such thing in the name and on behalf of the person subject to the disability.

(2) An appointment may be made by the court for the purposes of this section upon the petition of any person acting on behalf of the person subject to the disability or of any other person interested, 40 in the making of the statement or the doing of the thing.

149. Any notice required or authorised to be given by or under this Act, and any application or other document so authorised or required to be made or filed, may be given, made or filed by post. Service of notices, etc., by post.

150. If any party by whom notice of any opposition is given under this Act or by whom application is made to the Controller for the grant of a licence under a patent neither resides nor carries on business in India, the Controller may require him to give security for the costs of the proceedings, and in default of such security being given may treat the opposition or application as abandoned. Security for costs.

151. (1) Every order of the High Court on a petition for revocation, including orders granting certificates of validity of any claim, shall be transmitted by the High Court to the Controller who shall cause an entry thereof and reference thereto to be made in the register. Transmission of orders of courts to Controller.

152. (2) Where in any suit for infringement of a patent or in any suit under section 106 the validity of any claim or a specification is contested and that claim is found by the court to be valid or not valid, as the case may be, the court shall transmit a copy of its judgment and decree to the Controller who shall on receipt thereof cause an entry in relation to such proceeding to be made in the prescribed manner in a supplemental record.

(3) The provisions of sub-sections (1) and (2) shall also apply to the court to which appeals are preferred against decisions of the courts referred to in those sub-sections.

152. Copies of all such specifications, drawings and amendments left at the patent office as become open to public inspection under the provisions of this Act, shall be transmitted, as soon as may be, after the printed copies thereof are available, to such authorities as the Central Government may appoint in this behalf, and shall be open to the inspection of any person at all reasonable times at places to be specified by those authorities and with the approval of the Central Government. Transmission of copies of specifications, etc., and inspection thereof.

153. A person making a request to the Controller in the prescribed manner for information relating to any such matters as may be prescribed as respects any patent specified in the request or as respects any application for a patent so specified shall be entitled, subject to the payment of the prescribed fee, to have information supplied to him accordingly. Information relating to patents.

154. If a patent is lost or destroyed, or its non-production is accounted for to the satisfaction of the Controller, the Controller may at any time, on application made in the prescribed manner and on Loss or destruction of patent.

payment of the prescribed fee, cause a duplicate thereof to be sealed and delivered to the applicant.

Reports
of
Controller
to be
placed
before
Parlia-
ment.

155. The Central Government shall cause to be placed before both Houses of Parliament once a year a report respecting the execution of this Act by or under the Controller. 5

Patent
to bind
Govern-
ment.

156. Subject to the other provisions contained in this Act, a patent shall have to all intents the like effect as against Government as it has against any person.

Right of
Govern-
ment to
sell or
use for-
feited arti-
cles.

157. Nothing in this Act shall affect the power of the Government or of any person deriving title directly or indirectly from the Government to sell or use any articles forfeited under any law for the time being in force. 10

Power of
High
Courts to
make
rules.

158. The High Court may make rules consistent with this Act as to the conduct and procedure in respect of all proceedings before it under this Act. 15

Power of
Central
Govern-
ment to
make
rules.

159. (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

(2) Without prejudice to the generality of the foregoing power, the Central Government may make rules to provide for all or any of the following matters, namely:— 20

(i) the form and manner in which any application for a patent, any specifications or drawings and any other application or document may be filed in the patent office;

(ii) the time within which any act or thing may be done under this Act, including the manner in which and the time within which any matter may be advertised under this Act; 25

(iii) the fees which may be payable under this Act and the manner of payment of such fees;

(iv) the matters in respect of which the examiner may make a report to the Controller; 30

(v) the form of request for the sealing of a patent;

(vi) the form and manner in which and the time within which any notice may be given under this Act;

5 (vii) the provisions which may be inserted in an order for restoration of a patent for the protection of persons who may have availed themselves of the subject-matter of the patent after the patent had ceased;

10 (viii) the establishment of branch offices of the patent office and the regulation generally of the business of the patent office, including its branch offices;

(ix) the maintenance of the register of patents and the matters to be entered therein;

(x) the matters in respect of which the Controller shall have powers of a civil court;

15 (xi) the time when and the manner in which the register and any other document open to inspection may be inspected under this Act;

(xii) the qualifications of, and the preparation of a roll of, scientific advisers for the purpose of section 115;

20 * * * * *

(xiii) the manner in which any compensation for acquisition by Government of an invention may be paid;

25 (xiv) the manner in which the register of patent agents may be maintained; the conduct of qualifying examinations for patent agents; and matters connected with their practice and conduct, including the taking of disciplinary proceedings against patent agents for misconduct;

30 (xv) the regulation of the making, printing, publishing and selling of indexes to, and abridgments of, specifications and other documents in the patent office; and the inspection of indexes and abridgments and other documents;

(xvi) any other matter which has to be or may be prescribed.

(3) The power to make rules under this section shall be subject to the condition of the rules being made after previous publication.

Rules to
be placed
before
Parliament.

160. Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament while it is in session for a total period of thirty days which may be comprised in one session or in two successive sessions, and, if before the expiry of the session in which it is so laid or in the session immediately following, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule. 5 10

Special
provisions
with
respect to
certain
applica-
tions
deemed
to have
been
refused
under
Act
of 1911.

161. (1) Where, as a result of action taken by the Controller under section 12 of the Atomic Energy Act, 1948, or under section 20 of the Atomic Energy Act, 1962, an application for a patent made before the commencement of this Act could not be accepted within the time specified for the purpose in the Indian Patents and Designs Act, 1911 (hereafter in this section referred to as the repealed Act), and, consequently, was deemed to have been refused by reason of sub-section (4) of section 5 of the repealed Act, the application may, if the applicant, or, if he is dead his legal representative, makes a request in that behalf to the Controller in the prescribed manner within three months from the commencement of this Act, be revived and shall be disposed of as if it were an application pending at the commencement of this Act to which the provisions of this Act apply by reason of sub-section (3) of section 162. 15 20 25 29 of 37 of 2 of 15,

(2) The Controller may, before proceeding to act upon any such request as is referred to in sub-section (1), refer the matter to the Central Government for directions as to whether the invention is one relating to atomic energy and shall act in conformity with the directions issued by it. 30

(3) Where in pursuance of any such application as is referred to in sub-section (1) a patent is granted, the rights of the patentee shall be subject to such conditions as the Controller thinks fit to impose for the protection or compensation of persons who may have begun to avail themselves of, or have taken definite steps by contract or otherwise to avail themselves of, the patented invention before the date of advertisement of the acceptance of the complete specification. 35 40

(4) A patent granted in pursuance of any such application as is referred to in sub-section (1) shall be dated as of the date on which the request for reviving such application was made under sub-section (1).

5 162. (1) The Indian Patents and Designs Act, 1911, in so far as it relates to patents, is hereby repealed, that is to say, the said Act shall be amended in the manner specified in the Schedule.

Repeal of Act 2 of 1911 in so far as it relates to patents and savings.

(2) Notwithstanding the repeal of the Indian Patents and Designs Act, 1911, in so far as it relates to patents—

10 (a) the provisions of section 21A of that Act and of any rules made thereunder shall continue to apply in relation to any patent granted before the commencement of this Act in pursuance of that section, and

15 (b) the renewal fee in respect of a patent granted under that Act shall be as fixed thereunder.

(3) Save as otherwise provided in sub-section (2), the provisions of this Act shall apply to any application for a patent pending at the commencement of this Act and to any proceedings consequent thereon and to any patent granted in pursuance thereof.

20 (4) The mention of particular matters in this section shall not prejudice the general application of the General Clauses Act, 1897, with respect to repeals.

25 (5) Notwithstanding anything contained in this Act, any suit for infringement of a patent or any proceeding for revocation of a patent, pending in any court at the commencement of this Act, may be continued and disposed of, as if this Act had not been passed.

30 163. In sub-section (1) of section 4 of the Trade and Merchandise Marks Act, 1958, the words and figures "and the Controller of Patents and Designs for the purposes of the Indian Patents and Designs Act, 1911" shall be omitted.

Amend- ment of Act 43 of 1958.

THE SCHEDULE

[See section 162]

AMENDMENTS TO THE INDIAN PATENTS AND DESIGNS ACT, 1911

1. Long title—Omit “Inventions and”.
2. Preamble—Omit “inventions and”. 5
3. Section 1—In sub-section (1) omit “Indian Patents and”.
4. Section 2—
 - (a) omit clause (1) ;
 - (b) in clause (2) omit “(as respects designs)”;
 - (c) for clause (3), substitute— 10
(3) “Controller” means the Controller General of Patents, Designs and Trade Marks appointed under sub-section (1) of section 4 of the Trade and Merchandise Marks Act, 1958;” 43 of 1958
 - (d) in clause (5) for “trade mark as defined in section 478”, substitute “trade mark as defined in clause (v) of sub-section (1) of section 2 of the Trade and Merchandise Marks Act, 1958”; 43 of 1958
 - (e) omit clause (6);
 - (f) in clause (7), after sub-clause (e) insert—
“(f) in relation to the Union territories of Dadra and Nagar Haveli and Goa, Daman and Diu, the High Court of Bombay; 20
(g) in relation to the Union territory of Pondicherry, the High Court of Madras;”;
 - (g) omit clauses (8), (10) and (11); 25
 - (h) for clause (12), substitute—
(12) “Patent Office” means the patent office referred to in section 74 of the Patents Act, 1966.
5. Omit Part I.

6. For section 51B, substitute—

“51B. A registered design shall have to all intents the like effect as against Government as it has against any person and the provisions of Chapter XVII of the Patents Act, 1966, shall apply to registered designs as they apply to patents.”

Designs
to bind
Govern-
ment.

7. In section 54, for “The provisions of this Act”, substitute “The provisions of the Patents Act, 1966”.

8. Omit sections 55 and 56.

9. Section 57—For sub-section (1), substitute—

“(1) There shall be paid in respect of the registration of designs and applications therefor and in respect of other matters relating to designs under this Act such fees as may be prescribed by the Central Government.”

10. Omit section 59A.

11. Section 61—Omit sub-section (1).

12. For section 62, substitute—

“62. The Controller may, on request in writing accompanied by the prescribed fee, correct any clerical error in the representation of a design or in the name or address of the proprietor of any design or in any other matter which is entered upon the register of designs.”

Power
of
Control-
ler to
correct
clerical
errors.

13. Section 63—

(a) in sub-section (1), omit “to a patent or” and “patent or”;

(b) in sub-section (2), omit “patent or” and for “patents or designs, as the case may be,” substitute “designs,”;

(c) in sub-section (3), omit “patent or” wherever that expression occurs;

(d) in sub-section (4), omit “to a patent or”.

14. Section 64—

(a) in sub-section (1), omit “patents or” and omit “either” wherever that word occurs;

(b) in sub-section (5), omit clause (a).

15. Omit section 66.

16. Section 67—Omit “for a patent, or for amendment of an application or of a specification, or”.

17. Section 69—In sub-section (1), omit “to grant a patent for an invention or”.
18. Section 71A—Omit “or from patents, specifications and other.”.
19. Omit section 72.
20. Omit sections 74A and 75. 5
21. Section 76—
- (a) in sub-section (1), omit “other”;
- (b) in sub-section (2), in clause (c), omit “opponent”.
22. Section 77—
- (a) in sub-section (1)— 10
- (i) in clauses (c) and (d), omit “specifications”;
- (ii) for clause (e), substitute—
- “(e) providing for the inspection of documents in the patent office and for the manner in which they may be published;”;
- (iii) omit clause (eee); 15
- (b) omit sub-section (2A).
23. Omit section 78.
24. For section 78A, substitute—
- “78A. (1) Any person who has applied for protection for 20 any design in the United Kingdom or his legal representative or assignee shall, either alone or jointly with any other person, be entitled to claim that the registration of the said design under this Act shall be in priority to other applicants and shall have the same date as the date of the application in the United King- 25 dom:
- Provided that—
- (a) the application is made within six months from the application for protection in the United Kingdom; and
- (b) nothing in this section shall entitle the proprietor 30 of the design to recover damages for infringements happening prior to the actual date on which the design is registered in India.

Reciprocal
arrangement
with
United
Kingdom
and
other
Common-
wealth
countries.

(2) The registration of a design shall not be invalidated by reason only of the exhibition or use of, or the publication of a description or representation of, the design in India during the period specified in this section as that within which the application may be made.

(3) The application for the registration of a design under this section must be made in the same manner as an ordinary application under this Act.

(4) Where it is made to appear to the Central Government that the legislature of any such Commonwealth country as may be notified by the Central Government in this behalf has made satisfactory provision for the protection of designs registered in India, the Central Government may, by notification in the Official Gazette, direct that the provisions of this section, with such variations or additions, if any, as may be set out in such notification, shall apply for the protection of designs registered in that Commonwealth country."

25. Omit the Schedule.

APPENDIX I

(Vide para 2 of the Report)

Motion in Lok Sabha for reference of the Bill to Joint Committee.

"That the Bill to amend and consolidate the law relating to patents, be referred to a Joint Committee of the Houses consisting of 48 members, 32 from this House, namely:—

- (1) Shri S. V. Krishnamoorthy Rao
- (2) Seth Achal Singh
- (3) Shri Peter Alvares
- (4) Shri Ramchandra Vithal Bade
- (5) Shri Panna Lal Barupal
- (6) Shri Dinen Bhattacharya
- (7) Shri Bibhuti Mishra
- (8) Shri P. C. Borooah
- (9) Sardar Daljit Singh
- (10) Shri Basanta Kumar Das
- (11) Shri V. B. Gandhi
- (12) Shri H. K. V. Gowdh
- (13) Shri Kashi Ram Gupta
- (14) Shri Prabhu Dayal Himatsingka
- (15) Shri Madhavrao Laxmanrao Jadhav
- (16) Shri Mathew Maniyangadan
- (17) Shri M. R. Masani
- (18) Shri Braj Behari Mehrotra
- (19) Shri Bibudhendra Mishra
- (20) Shrimati Sharda Mukerjee
- (21) Shri P. S. Naskar
- (22) Shri Chhotubhai M. Patel
- (23) Shri Naval Prabhakar

- (24) Shri R. Ramanathan Chettiar
- (25) Shri Sham Lal Saraf
- (26) Shri A. T. Sarma
- (27) Dr. C. B. Singh
- (28) Dr. L. M. Singhvi
- (29) Shri P. Venkatasubbaiah
- (30) Shri K. K. Warior.
- (31) Shri Balkrishna Wasnik
- (32) Shri Ram Sewak Yadav

and 16 from Rajya Sabha;

that in order to constitute a sitting of the Joint Committee the quorum shall be one-third of the total number of members of the Joint Committee;

that the Committee shall make a report to this House by the first day of the second week of the next session;

that in other respects the Rules of Procedure of this House relating to Parliamentary Committees shall apply with such variations and modifications as the Speaker may make; and

that this House recommends to Rajya Sabha that Rajya Sabha do join the said Joint Committee and communicate to this House the names of 16 members to be appointed by Rajya Sabha to the Joint Committee."

APPENDIX II

(Vide para 3 of the Report)

Motion in Rajya Sabha

“That this House concurs in the recommendation of the Lok Sabha that the Rajya Sabha do join in the Joint Committee of the Houses on the Bill to amend and consolidate the law relating to patents, and resolves that the following members of the Rajya Sabha be nominated to serve on the said Joint Committee:—

- (1) Shri Arjun Arora
- (2) Shri T. Chengalvaroyan
- (3) Shri Babubhai M. Chinal
- (4) Shri Vimalkumar M. Chordia
- (5) Shri R. S. Doogar
- (6) Shri D. P. Karmarkar
- (7) Shri B. T. Kulkarni
- (8) Shri P. K. Kumaran
- (9) Shri Shyamnandan Mishra
- (10) Shri Dahyabhai V. Patel
- (11) Shri Mulka Govinda Reddy
- (12) Shri M. R. Shervani
- (13) Dr. M. M. S. Siddhu
- (14) Shri Dalpat Singh
- (15) Shri R. P. Sinha
- (16) Shri T. N. Singh.”

APPENDIX III

[Vide para 7 of the Report]

Statement Showing the names of Associations/ individuals etc. from whom Memoranda/ Representations were received by the Joint Committee

Sl. No.	From whom received	Action taken
1	2	3
1	L.S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta.	Circulated to Members and evidence taken on 27th and 28th January, 1966.
2	Remfry & Son, Patent & Trade Mark Attorneys, Calcutta.	Circulated to Members and evidence taken on 28th and 29th January, 1966.
3	British Pharmaceutical Industry Association, England.	Circulated to Members and evidence taken on 31st January, 1966.
4	Zandu Pharmaceutical Works Limited, Bombay.	Do.
5	The Chemical Industrial and Pharmaceutical Laboratories Ltd., Bombay.	Circulated to Members and evidence taken on 1st Feb., 1966.
6	Dr. J. M. Hunck, Chief Editor, Handelsblatt, Duesseldorf, West Germany.	Circulated to Members and evidence taken on 2nd February, 1966.
7	Dr. E. Jucker, Incharge of Synthetic Research, Sandoz Ltd., Basle (Switzerland).	Circulated to Members and evidence taken on 3rd February, 1966.
8	Prof. G.H.C. Bodenhausen Director of United International Bureau for the Protection of Intellectual Property (BIRPI) Geneva.	Circulated to Members and evidence taken on 23rd April, 1966.
9	National Foreign Trade Council Inc. 10 Rockefeller, Plaza, New York.	Circulated to Members and Evidence taken on 1st July, 1966.
10	Chamber of Commerce of the United States of America, Washington.	Circulated to Members and evidence taken on 2nd July, 1966.
11	Association of Chemical Industry in West Germany.	Circulated to Members and evidence taken on 4th July, 1966.
12	Centre European Des Federations De L' Industrie Chimique Bureau, Zurich.	Circulated to Members and evidence taken on 4th July, 1966.
13	Prof. Gino Bergami, Director, Institute DI Fesiologia Umana Universita (Nepals) and	Circulated to Members and evidence taken on 5th July, 1966.

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	Dr. Giorgio Delgiudice, Leodoga SPA Lepetit, Via Andhrea Vesalio 6, Rome (Assisted by Mr. Gabriel Brohamasha as Interpreter).	
14	Japan Pharmaceutical Manufacturers' Association, Japan Pharmaceutical, Medical and Dental Supply Exporters' Association and Federation of Economic Organizations, Tokyo.	Circulated to Members and evidence taken on 5th July, 1966.
15	The Indian Merchants Chamber, Bombay.	Circulated to Members and evidence taken on 6th July, 1966.
16	Trade Marks Owners Association of India, Bombay.	Do.
17	Indian Pharmaceutical Association, Bombay.	Circulated to Members and evidence taken on 7th July, 1966.
18	Bundesverband Der Pharmazeutischen & Industries E.V. Brankfurt Am Main, West Germany, Association of the German Pharmaceutical Industry, Frankfurt Am Main.	Do.
19	Neo-Pharma Industries, Bombay	Circulated to Members and evidence taken on 8th July, 1966.
20	Haffkine Institute, Bombay	Do.
21	Mr. J.F. Monnet, Chambre Syndicate Nationale des Fabricants de Produits Pharmaceutiques, 88 Rue de la Faisanderie, Paris—16.	Do.
22	Dr. T.R. Govindachari, Director, CIBA Research Centre, Goregaon, Bombay.	Circulated to Members and evidence taken on 11th July, 1966.
23	All India Drugs & Pharmaceuticals Manufacturers' Consultative Committee, Bombay.	Do.
24	All India Manufacturers' Organisation, Bombay.	Do.
25	Sarvashri G.M. Parikh, H.J. Vaidya and S.C. Nanabhai, Zandu Pharmaceutical Works Ltd., Bombay.	Circulated to Members and evidence taken on 11th July, 1966.
26	Indian Chamber of Commerce, Calcutta.	Circulated to Members and evidence taken on 12th July, 1966.
27	Associated Chambers of Commerce and Industry of India, Calcutta.	Do.
28	Bengal Chemists and Druggists Association, Calcutta.	Do.
29	Shri T. Durairajan, Dollar Company, Madras.	Circulated to Members and evidence taken on 13th July, 1966.
30	Pharmaceutical Manufacturers' Organisation Ahmedabad.	Do.
31	Gujarat Veapari Mahamandal, Ahmedabad	Do.

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32	Pharmacy Council of India, New Delhi	Circulated to Members and evidence taken on 14th July, 1966.
33	Federation of Indian Chambers of Commerce and Industry, New Delhi.	Do.
34	Dr. V.B. Chipalkatti, Director, Shri Ram Institute for Industrial Research, Delhi	Do.
35	Business Council for International Understanding, New York.	Do.
36	Organisation of Pharmaceutical Producers of India, Bombay.	Circulated to Members and evidence taken on 15th July, 1966.
37	Indian Chemical Manufacturers' Association, Bombay.	Do.
38	Incorporated Law Society of Calcutta	Circulated to Members and evidence taken on 12th August, 1966.
39	Council of Scientific and Industrial Research, New Delhi.	Do.
40	Directorate General of Technical Development, Government of India, New Delhi.	Circulated to Members and evidence taken on the 26th August, 1966.
41	Shri S.K. Borkar, Drug Controller, Government of India, New Delhi.	Circulated to Members and evidence taken on 27th the August, 1966.
42	Dr. A. Joga Rao, Controller General of Patents and Designs, Government of India, Bombay.	Do.
43	Confederation of British Industry, London	Circulated to Members.
44	Chemical Industries Association Limited, London.	Do.
45	Shri N. Adhikari, Bengal Chemical and Pharmaceutical Works Ltd., Calcutta.	Do.
46	National Association of Manufacturers, New York.	Do.
47	U.S. Council of the International Chamber of Commerce Inc., New York.	Do.
48	Manufacturing Chemists' Association, Inc., Washington.	Do.
49	Japan Patents Association, Tokyo.	Do.
50	Embassy of the United States of America, New Delhi.	Do.
51	Embassy of the Federal German Republic, New Delhi.	Do.
52	Swiss Association of Machinery Manufacturers and Swiss Patent Commission, Switzerland.	Do.

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53	Shri B.K. Nyogi, Auckland Mansions, 617, Lower Circular Road, Calcutta.	Circulated to Members.
54	The Indo-German Chamber of Com- merce, Bombay.	Do.
55	Srikar Pai & Co., Patent and Trade Mark Attorneys, Calcutta.	Do.
56	Depenning & Depenning Patent and Trade Mark Agents, Calcutta.	Do.
57	The All India Association of Industries, Bombay.	Do.
58	Association of Physicians of India, Bom- bay.	Do.
59	Federation of German Industry Cogn.	Do.
60	The Patent & Trade Mark Practitioners Association, Bombay.	Do.
61	Shri N. Bose, Chief Chemist, Simplex Brothers, Research Chemists, Calcutta.	Do.
62	Major General Sir Sahib Singh Sokhey, Haffkine Institute, Bombay.	Do.
63	The Chartered Institute of Patent Agents, London.	Do.
64	The Southern Indian Chamber of Commerce Madras.	Kept in the Library
65	The Bangalore Bar Association, Kempegow- da Road, Bangalore.	Do.
66	Dr. (Mrs.) Asima Chatterjee, D. Sc. [Khaira Professor of Chemistry, University Col- lege of Science and Technology, Univer- sity of Calcutta.	Do.
67	Shri N.R. Amin, Director, Public Relations, Alembic Chemical Works Co. Ltd., Alem- bic Road, Baroda.	Do.
68	Bombay Incorporated Law Society, High Court New Building, Bombay.	Do.
69	V. Bolshakov, Head of the Department (Soviet Review)	Do.
70	Dr. M. D. 'Phalnikar, Gokhle Road, Bombay.	Do.

APPENDIX IV

(Vide para 9 of the Report)

Visited by Study Groups of the Joint Committee, on the Patents Bill, 1965. Pharmaceutical units, Research Institutes/Laboratories etc. for an on-the-spot-study of their working.

Composition of Study Groups	Units Visited with dates
<i>Composition of Study Group—I (Bombay Region)</i>	
<p>1. Shri S. V. Krishnamoorthy Rao— <i>Chairman</i></p> <p>2. Shri Peter Alvares *3. Shri Ramchandra Vithal Bade 4. Sardar Daljit Singh 5. Shri Basanta Kumar Das **6. Shri V. B. Gandhi 7. Shri Kashi Ram Gupta †8. Shri M. R. Masani 9. Shri Chhotubhai M. Patel 10. Shri R. Ramanathan Chertiar 11. Shri Sham Lal Saraf 12. Shri A. T. Sarma @13. Shri Ram Sewak Yadav 14. Shri Arjun Arora †15. Shri Babubhai M. Chinai 16. Shri P. K. Kumaran 17. Dr. M. M. S. Siddhu §18. Shri R. P. Sinha</p>	<p style="text-align: center;"><i>Monday, the 6th June, 1966</i></p> <p>1. Zandu Pharmaceutical Works Ltd., Bombay. 2. Chemical Industrial and Pharmaceutical Laboratories (Cipla), Bombay. 3. K. Mahadev and Company Private Ltd., Bombay. <i>Tuesday, The 7th June, 1966</i></p> <p>4. Glaxo Fine Chemical Factory, Thana. 5. Ciba Research Centre, Bombay. 6. Haffkine Institute, Bombay. <i>Wednesday, The 8th June, 1966</i></p> <p>7. Merck Sharp and Dohme of India, Private Ltd., Bombay. 8. Hoechst Pharmaceuticals, Bombay. <i>Thursday, The 9th June, 1966</i></p> <p>9. Alembic Chemicals, Baroda. 10. Sarabhai Chemicals, Baroda. <i>Friday, The 10th June, 1966</i></p> <p>11. Sandoz, Bombay. 12. Unichem Laboratories, Bombay. <i>Saturday, The 11th June, 1966</i></p> <p>13. Hindustan Antibiotics Ltd., Pimpri (Poona).</p>

*Arrived Bombay on the 6th June, 1966. Joined the Study Group w.e.f. 6th June, 1966 onwards.

**Did not visit Baroda.

†Joined the Study Group on the 7th June and did not visit Baroda and Poona.

@Left Bombay for Delhi on the 10th June, 1966 in the afternoon. Did not visit Poona.

§Arrived Bombay on the 9th June, 1966. Did not visit Baroda.

Composition of Study Group—II

1. Shri S. V. Krishnamoorthy Rao—
Chairman. *Monday, The 13th June, 1966*
2. Seth Achal Singh
3. Shri Panna Lal Barupal
*4. Shri Dinen Bhattacharya
5. Shri Bibhuti Mishra
6. Shri Prabhu Dayal Himatsingka
7. Shri Madhavrao Laxmanrao Jadhav
8. Shri Braj Behari Mehrotra
9. Shri Naval Prabhakar
**10. Dr. C. B. Singh
11. Shri K. K. Warior
†12. Shri Balkrishna Wasnik
13. Shri Vimalkumar M. Chordia
†14. Shri D. P. Karmarkar
††15. Shri Shyamnandan Mishra
§16. Shri Dahyabhai V. Patel
17. Shri Dalpat Singh
18. Shri B. K. Das
1. Bengal Chemical & Pharmaceutical Works Ltd., Calcutta.
2. The Bengal Immunity Co. Ltd., Calcutta
- Tuesday, The 14th June, 1966*
13. Standard Pharmaceutical Limited., Calcutta.
4. M/s. Smith Stanistreet & Co. Ltd., Calcutta.
- Wednesday, The 15th June, 1966*
5. M/s. Martin & Harris (Pvt.) Ltd., Calcutta.
6. Dey's Medical Stores (Mfg.) Pvt. Ltd., Calcutta.
- Thursday, The 16th June, 1966*
7. Kaviraj N. N. Sen & Co. Private Ltd., Calcutta.
8. East India Pharmaceutical Works Ltd., Calcutta.
9. Dabur (Dr. S. K. Burman) Private Ltd., Calcutta.
- Friday, The 17th June, 1966*
10. Paul Lohmann (India) Ltd., Calcutta.
11. Tata Fison Industries Ltd., Calcutta.
12. Patent Office-*Informal discussion with the Joint Controller of Patents and Designs, Calcutta.*

Composition of Study Group—III.

1. Shri S. V. Krishnamoorthy Rao—
Chairman. *Saturday, The 18th June, 1966*
2. Seth Achal Singh
3. Shri Panna Lal Barupal
4. Shri Dinen Bhattacharya
5. Shri Bibhuti Mishra
6. Shri Madhavrao Laxmanrao Jadhav
7. Shri Braj Behari Mehrotra
8. Shri Naval Prabhakar
9. Shri Balkrishna Wasnik
10. Shri Vimalkumar M. Chordia
11. Shri Dalpat Singh
12. Shri Mulka Govinda Reddy
13. Shri P. K. Kumaran
14. Shri Kashi Ram Gupta
13. Calcutta Chemical Co. Ltd., Calcutta.
14. Albert David Ltd., Calcutta.
(Chandigarh)
- Saturday, The 16th July, 1966*
Pfizer's Basic Manufacturing Plant
Chandigarh.

*Joined the Group from the 14th June, 1966 onwards.

**Left Calcutta on the 17th June, 1966 (A.N.)

†Left Calcutta on the 18th June, 1966 (F.N.)

‡Left Calcutta on the 16th June, 1966 (A.N.)

††Joined the Group from the 14th June, 1966 onwards.

§Joined the Group from the 15th June, 1966 onwards.

Composition of Study Group—IV.

(Lucknow)

1. Shri S. V. Krishnamoorthy Rao—
Chairman.
2. Shri P. C. Borooah
3. Shri Basanta Kumar Das
4. Shri Kashi Ram Gupta
5. Shri Vimalkumar M. Chordia.
6. Shri P. K. Kumaran
7. Shri R. P. Sinha
8. Dr. C. B. Singh
9. Shri M. R. Shervani
10. Seth Achal Singh
11. Shri Braj Behari Mehrotra.
12. Dr. M. M. S. Siddhu.

Saturday, The 6th August, 1966

Central Drug Research Institute, Lucknow.

Composition of Study Group—V.

(Jammu)

1. Shri S. V. Krishnamoorthy Rao—
Chairman.
2. Shri Ramchandra Vithal Bade
3. Shri Dinen Bhattacharya
4. Shri Bibhuti Mishra
5. Shri P. C. Borooah
6. Sardar Daljit Singh
7. Shri H. K. V. Gowdh
8. Shri Madhavrao Laxmanrao Jadhav
9. Shri Mathew Maniyangadan
10. Shri Braj Behari Mahrotra
11. Shri Naval Prabbakar
12. Shri R. Ramanathan Chettiar
13. Shri Sham Lal Saraf
14. Shri A. T. Sarma
15. Shri K. K. Warior
16. Shri D. P. Karmarkar
17. Dr. M. M. S. Siddhu
18. Shri Dalpat Singh

*Saturday, The 20th August, 1966*Regional Research Laboratory, and
Chakroha Farm, Jammu.

APPENDIX V

(Vide para 10 of the Report)

List of Associations/Individuals etc. who gave evidence before the Joint Committee

S. No.	Names of Parties/Individuals	Dates on which evidence was taken
1	L.s. Davar & Co., Patent & trade Mark Attorneys, Calcutta.	27-1-1966 & 28-1-66
2	Remfry & Son, Patent & Trade Mark Attorneys, Calcutta.	28-1-1966 & 29-1-66
3	British Pharmaceutical Industry Association, England.	31-1-1966
4	Zandu Pharmaceutical Works Limited, Bombay.	31-1-1966
5	The Chemical, Industrial and Pharmaceutical Laboratories Ltd., Bombay	1-2-1966
6	Dr. J. M. Hunck, Chief Editor, Handelsblatt, Duesseldorf West Germany	2-2-1966
7	Dr. E. Jucker, Incharge of synthetic Research, Sandoz Ltd., Basle (Switzerland).	3-2-1966
8	Prof. G. H. C. Bodenhausen, Director of United International Bureau for the Protection of Intellectual Property (BIRPI), Geneva.	23-4-1966
9	National Foreign Trade Council Inc. 10, Rockefeller, Plaza, New York	1-7-1966
10	Chamber of Commerce of the United States of America, Washington	2-7-1966
11	Association of Chemical Industry in West Germany.	4-7-1966
12	Centre Europeen Des Federations De L'—Industrie Chimique Bureau, Zurich.	4-7-1966
13	Prof. Gino Bergani, Director, Institute DI Fisiologia Umana Universita (Naples) and Dr. Giorgio Delgiudice, Leodoga SPA Lepetit, Via Andrea Vesalio 6, Rome, (Assisted by Mr. Gabriel Brohama sha as Interpreter).	5-7-1966
14	Japan Pharmaceutical Manufacturers' Association, Japan Pharmaceutical, Medical and Dental Supply Exporters' Association and Federation of Economic Organizations, Tokyo.	5-7-1966
15	The Indian Merchants Chamber, Bombay.	6-7-1966
16	Trade Marks Owners Association of India.	6-7-1966
17	Indian Pharmaceutical Association, Bombay.	7-7-1966

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18 Bundesverband Der Pharmazeutischen & Industries E. V. Frankfurt Am Main, West Germany, Association of the German Pharmaceutical Industry, Frankfurt Am Main..		7-7-1966
19 Neo-Pharma Industries, Bombay.		8-7-1966
20 Haffkine Institute, Bombay.		8-7-1966
21. Mr. J. F. Monnet, Chambre Syndicale Nationale des Fabricants de Produits Pharmaceutiques, 88 Rue dela Faisanderie, Paris—16.		8-7-1966
22 Dr. T. R. Govindachari, Director, CIBA Research Centre, Goregaon, Bombay.		11-7-1966
23 All India Drugs & Pharmaceuticals Manufacturers' Con- sultative Committee, Bombay.		11-7-1966
24 All India Manufacturers' Organisation, Bombay.		11-7-1966
25 Sarvashri G. M. Parikh, H. J. Vaidya and S. C. Nanabhai, Zandu Pharmaceutical Works Ltd., Bombay.		11-7-1966
26 Indian Chamber of Commerce, Calcutta.		12-7-1966
27 Associated Chambers of Commerce and Industry of India, Calcutta.		12-7-1966
28 Bengal Chemists and Druggists Association, Calcutta		12-7-1966
29 Shri T. Durairajan, Dollar Company, Madras.		13-7-1966
30 Pharmaceutical Manufacturers' Organisation, Ahmedabad		13-7-1966
31 Gujarat Vepari Mahamandal, Ahmedabad.		13-7-1966
32 Pharmacy Council of India, New Delhi.		14-7-1966
33 Federation of Indian Chambers of Commerce & Industry, New Delhi.		14-7-1966
34 Dr. V. B. Chipalkatti, Director, Shri Ram Institute for Industrial Research,, Delhi.		14-7-1966
35 Business Council for International Understanding, New York		14-7-1966
36 Organisation of Pharmaceutical Producers of India, Bombay		15-7-1966
37 Indian Chemical Manufacturers' Association, Bombay.		15-7-1966
38 Incorporated Law Society of Calcutta.		12-8-1966
39 Council of Scientific and Industrial Research New Delhi.		12-8-1966
40 Directorate General of Technical Development, Govern- ment of India, New Delhi		26-8-1966
41 Dr. M. L. Dhar, Director, Central Drug Research Institute, Lucknow.		26-8-1966

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42	(i) Shri S. K. Borkar, Drug Controller, Government of India New Delhi (ii) Shri P.S. Ramachandran, Deputy Drug Controller, Government of India, New Delhi	27-8-1966
43	(i) Dr. A. Joga Rao, Controller General of Patents and Designs, Government of India, Bombay. (ii) Shri R. V. Pai, Joint Controller of Patents and Designs, Calcutta.	27-8-1966

APPENDIX VI

*Minutes of the Sittings of the Joint Committee on the Patents Bill,
1965.*

I

First Sitting

The Committee met on Saturday, the 11th December, 1965 from 14.30 to 15.05 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

1. Seth Achal Singh.
2. Shri Peter Alvares.
3. Shri Ramchandra Vithal Bade.
4. Shri Pana Lal Barupal.
5. Shri Dinen Bhattacharya.
6. Shri Bibhuti Mishra.
7. Shri P. C. Borooah.
8. Sadar Daljit Singh.
9. Shri V. B. Gandhi.
10. Shri Kashi Ram Gupta.
11. Shri Madhavrao Laxmanrao Jadhav.
12. Shri Mathew Maniyangadan.
13. Shri M. R. Masani.
14. Shri Braj Behari Mehrotra.
15. Shrimati Sharda Mukerjee.
16. Shri P. S. Naskar.
17. Shri Naval Prabhakar.
18. Dr. L. M. Singhvi.
19. Shri Ram Sewak Yadav.

Rajya Sabha

20. Shri Arjun Arora.
21. Shri Vimalkumar M. Chordia.
22. Shri B. T. Kulkarni.
23. Shri P. K. Kumaran.
24. Shri Shyamnandan Mishra.
25. Shri Dahyabhai V. Patel.
26. Shri Mulka Govinda Reddy.
27. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Sceretary, Department of Industry, Ministry of Industry & Supply.*
2. Shri B. N. Atrishi, *O.S.D., Department of Industry, Ministry of Industry & Supply.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

At the outset, the Chairman mentioned to the Committee about a letter received from one Mr. Leonard J. Robbins of M/s. Langner, Parry, Card & Langner, New York, a U.S. Patent lawyer and a Member of the New York Bar, who had expressed a desire to appear before the Committee as an individual patent attorney having an expert knowledge of international patent problems, and also on behalf of American clients, particularly those in the pharmaceutical field.

2. After some discussion, the Committee decided that a Press Communique be issued advising associations, public bodies and individuals who were desirous of presenting their suggestions or views or of giving evidence before the Committee in respect of the Bill, to send written memoranda thereon to the Lok Sabha Secretariat by the 12th January, 1966, at the latest.

3. The Committee authorised the Chairman to select the parties, after receipt of written memoranda, to be asked to send their representatives to give oral evidence.

4. The Committee desired the Ministry of Industry & Supply to furnish the following material to them as early as possible:—

- (i) A note stating the various aspects of the working of the various Patent Offices in India under the Ministry of Industry;
- (ii) A note stating the working of the existing Patent Law in India *vis-a-vis* that obtaining in U.S.A., U.K., U.S.S.R., and other European countries;
- (iii) Report of Shri N. Rajagopala Ayyangar on the Law of Patents in India;
- (iv) A note stating the salient features of the Kaufever Committee Report of the U.S.A., Senate along with a copy of the Report;
- (v) A note setting forth the salient features of the working of the International Patents Pool.

5. The Committee decided to sit from the 27th January, 1966, onwards for hearing oral evidence, if any, and for clause by clause consideration of the Bill.

6. The Committee then adjourned to meet again on Thursday, the 27th January, 1966 at 11-00 hours.

II

Second Sitting

The Committee met on Thursday, the 27th January, 1966 from 14-00 to 17-00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya

7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
12. Shri H. K. V. Gowdh
13. Shri Kashi Ram Gupta
14. Shri Prabhu Dayal Himatsingka
15. Shri Madhavrao Laxmanrao Jadhav
16. Shri Mathew Maniyangadan
17. Shri M. R. Masani
18. Shri Braj Behari Mehrotra
19. Shri Bibudhendra Mishra
20. Shrimati Sharda Mukherjee
21. Shri Chhotubhai M. Patel
22. Shri Naval Prabhakar
23. Shri R. Ramanathan Chettiar
24. Shri Sham Lal Saraf
25. Shri A. T. Sarma
26. Dr. C. B. Singh
27. Dr. L. M. Singhvi
28. Shri P. Venkatasubbaiah
29. Shri K. K. Warior
30. Shri Balkrishna Wasnik
31. Shri Ram Sewak Yadav.

Rajya Sabha

32. Shri Arjun Arora
33. Shri Vimalkumar M. Chordia
34. Shri R. S. Doogar
35. Shri D. P. Karmarkar
36. Shri B. T. Kulkarni
37. Shri P. K. Kumaran
38. Shri Dahyabhai V. Patel
39. Shri Mulka Govinda Reddy

40. Shri M. R. Shervani
41. Dr. M. M. S. Siddhu
42. Shri Dalpat Singh
43. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Department of Industry, Ministry of Industry & Supply.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Department of Industry, Ministry of Industry & Supply.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

L. S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta.

Shri I. S. Davar.

2. The Committee decided to continue their current series of sittings upto the 3rd February, 1966 and then to sit on the 15th February, 1966 for hearing oral evidence of Prof. Bodenhausen, Director, United International Bureau for the Protection of Intellectual Property (BIRPI), Geneva. The Committee decided to cancel the sittings fixed for the 4th, 5th and 12th February, 1966.

3. Before the witness was called in, it was pointed out that there were certain clauses in the Bill which sought to curtail the privileges, particularly relating to drugs and medicines, already granted

to the patentees in the public interest under the existing Law. The point as to whether such a curtailment offended against the provisions of the Constitution inasmuch as compensation was not provided for in the Bill should be examined.

4. The Committee heard Shri L. S. Davar of M/s. L. S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta. His evidence was not concluded.

5. The Committee desired that the Ministry of Industry and Supply be asked to furnish copies of the following publications for use of the Members as early as possible:—

- (1) The Role of Patents in the Transfer of Technology to Developing Countries (Published by the United Nations);
- (2) Model Law for Developing Countries on Inventions (B. I. R. P. I.) Geneva, 1965.

6. A verbatim record of the evidence given was taken.

7. The Committee then adjourned to meet again on Friday, the 28th January, 1966 at 14-00 hours for hearing further oral evidence on the Bill.

III

Third Sitting

The Committee met on Friday, the 28th January, 1966 from 14-00 to 17-15 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya

7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
12. Shri H. K. V. Gowdh
13. Shri Kashi Ram Gupta
14. Shri Prabhu Dayal Himatsingka
15. Shri Madhavrao Laxmanrao Jadhav
16. Shri Mathew Maniyangadan
17. Shri M. R. Masani
18. Shri Braj Behari Mehrotra
19. Shri Bibudhendra Mishra
20. Shrimati Sharda Mukerjee
21. Shri P. S. Naskar
22. Shri Chhotubhai M. Patel
23. Shri Naval Prabhakar
24. Shri R. Ramanathan Chettiar
25. Shri Sham Lal Saraf
26. Shri A. T. Sarma
27. Dr. C. B. Singh
28. Dr. L. M. Singhvi
29. Shri P. Venkatasubbaiah
30. Shri K. K. Warior
31. Shri Balkrishna Wasnik
32. Shri Ram Sewak Yadav.

Rajya Sabha

33. Shri Arjun Arora
34. Shri Babubhai M. Chinai
35. Shri Vimalkumar M. Chordia
36. Shri D. P. Karmarkar
37. Shri B. T. Kulkarni
38. Shri P. K. Kumaran
39. Shri Shyamnandan Mishra

40. Shri Dahyabhai V. Patel
41. Shri Mulka Govinda Reddy
42. Shri M. R. Shervani
43. Dr. M. M. S. Siddhu
44. Shri Dalpat Singh
45. Shri R. P. Sinha
46. Shri T. N. Singh.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Department of Industry, Ministry of Industry & Supply.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Department of Industry, Ministry of Industry & Supply.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

- I. *L. S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta.*
Shri L. S. Davar
- II. *Remfry & Son, Patent & Trade Mark Attorneys, Calcutta.*
 1. Mr. Harold Holloway
 2. Mr. Desh Pal Ahuja
 3. Mr. Baldev Chaturbhuj Ojha.

2. The Committee resumed further hearing of the evidence of Shri L. S. Davar. After his evidence was concluded, the Committee heard the representatives of M/s. Remfry & Son, Patent & Trade Mark Attorneys, Calcutta. Their evidence was not concluded.

3. A verbatim record of the evidence given was taken.

4. The Committee then adjourned to meet again on Saturday, the 29th January, 1966 at 13.30 hours for hearing further oral evidence on the Bill.

IV

Fourth Sitting

The Committee met on Saturday, the 29th January, 1966 from 13.30 to 15.50 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Panna Lal Barupal
5. Shri Bibhuti Mishra
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Prabhu Dayal Himatsingka
13. Shri Madhavrao Laxmanrao Jadhav
14. Shri Mathew Maniyangadan
15. Shri M. R. Masani
16. Shri Braj Behari Mehrotra
17. Shrimati Sharda Mukerjee

18. Shri P. S. Naskar
19. Shri Chhotubhai M. Patel
20. Shri Naval Prabhakar
21. Shri R. Ramanathan Chettiar
22. Shri Sham Lal Saraf
23. Shri A. T. Sarma
24. Dr. C. B. Singh
25. Dr. L. M. Singhvi
26. Shri P. Venkatasubbaiah
27. Shri K. K. Warior
28. Shri Ram Sewak Yadav.

Rajya Sabha

29. Shri Arjun Arora
30. Shri Babubhai M. Chinai
31. Shri Vimalkumar M. Chordia
32. Shri D. P. Karmarkar
33. Shri B. T. Kulkarni
34. Shri P. K. Kumaran
35. Shri Shyamnandan Mishra
36. Shri Dahyabhai V. Patel
37. Shri Mulka Govinda Reddy
38. Dr. M. M. S. Siddhu
39. Shri Dalpat Singh
40. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs & Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

- Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

Remfry & Son, Patent and Trade Mark Attorneys, Calcutta.

1. Mr. Harold Holloway
 2. Mr. Desh Pal Ahuja
 3. Mr. Baldev Chaturbhuj Ojha.
2. The Committee concluded further hearing of the evidence of the representatives of M/s. Remfry & Son, Patent & Trade Mark Attorneys, Calcutta.
3. A verbatim record of the evidence given was taken.
4. The Committee then adjourned to meet again on Monday, the 31st January, 1966 at 10.00 hours for hearing further oral evidence on the Bill.

V

Fifth Sitting

The Committee met on Monday, the 31st January, 1966 from 10.00 to 13.00 hours and again from 14.30 to 17.05 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Shri Pater Alvares
3. Shri Ramchandra Vithal Bade
4. Shri Panna Lal Barupal

5. Shri Bibhuti Mishra
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
16. Shrimati Sharda Mukerjee
17. Shri Chhotubhai M. Patel
18. Shri Naval Prabhakar
19. Shri R. Ramanathan Chettiar
20. Shri Sham Lal Saraf
21. Shri A. T. Sarma
22. Dr. L. M. Singhvi
23. Shri K. K. Warior
24. Shri Ram Sewak Yadav.

Rajya Sabha

25. Shri Vimalkumar M. Chordia
26. Shri D. P. Karmarkar
27. Shri B. T. Kulkarni
28. Shri P. K. Kumaran
29. Shri Shyamnandan Mishra
30. Shri Dahyabhai V. Patel
31. Shri Mulka Govinda Reddy
32. Dr. M. M. S. Siddhu
33. Shri Dalpat Singh
34. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

I. *British Pharmaceutical Industry Association, England*

Mr. A. G. Shaw

II. *Zandu Pharmaceutical Works Limited, Bombay*

Dr. K. M. Parikh

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. The Committee then adjourned to meet again on Tuesday, the 1st February, 1966 at 14.00 hours for hearing further oral evidence on the Bill.

 VI

 Sixth Sitting

The Committee met on Tuesday, the 1st February, 1966 from 14.00 to 17.10 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares

4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri Braj Behari Mehrotra
- 14A. Shri Bibudhendra Mishra
15. Shrimati Sharda Mukerjee
16. Shri Chhotubhai M. Patel
17. Shri Naval Prabhakar
18. Shri R. Ramanathan Chettiar
19. Shri Sham Lal Saraf
20. Shri A. T. Sarma
21. Dr. L. M. Singhvi
22. Shri K. K. Warior
23. Shri Balkrishna Wasnik
24. Shri Ram Sewak Yadav

Rajya Sabha

25. Shri Arjun Arora
26. Shri Vimalkumar M. Chordia
27. Shri D. P. Karmarkar
28. Shri B. T. Kulkarni
29. Shri P. K. Kumaran
30. Shri Shyamnandan Mishra
31. Shri Dahyabhai V. Patel
32. Shri Mulka Govinda Reddy
33. Shri M. R. Shervani
34. Dr. M. M. S. Siddhu
35. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

*The Chemical, Industrial and Pharmaceutical Laboratories Ltd.,
Bombay*

Dr. K. A. Hamied

2. At the outset, some members drew attention to a Press report appearing in some of the local Delhi newspapers according to which Dr. Jucker of Sandoz, Basle, Switzerland, who was to appear before the Committee on the 3rd February, 1966 for giving oral evidence, had told Reporters about his opinion on the question of Patents *vis-a-vis* drug research. It was felt that this foreign witness should not have rushed to the Press when he was to appear before the Joint Committee. After some discussion, it was decided that the Chairman might bring to the notice of the witness the impropriety of his action, when he appeared before the Committee.

3. The Chairman then mentioned to the Committee the contents of a cable dated the 31st January, 1966, received from Dr. Bodenhausen, Director BIRPI, Geneva, wherein he had requested the Committee to hear him on the 13th February, 1966, when he expected to be in Delhi on his way back from Colombo. While the Committee expressed their regret on their inability to accede to Dr. Bodenhausen's request, they decided that a cable should be sent to him asking him to intimate any Saturday during February or March, 1966, which would suit him. On hearing from him, a sitting of Joint Committee could be called.

4. The Committee then heard the evidence given by Dr. K. A. Hamied, Chairman of the Chemical, Industrial and Pharmaceutical Laboratories Limited, Bombay.

5. A verbatim record of the evidence given was taken.

6. Another witness, Dr. Abraham Patani, a representative of the Indian Drug Manufacturers Association, Bombay, was called in. Due to lack of time, the Committee informed him that some other day would be fixed for his oral evidence and he would be informed of it in due course.

7. The Committee then adjourned to meet again on Wednesday, the 2nd February, 1966 at 14.00 hours for hearing further oral evidence on the Bill.

VII

Seventh Sitting

The Committee met on Wednesday, the 2nd February, 1966 from 14.00 to 17.10 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan

14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
16. Shrimati Sharda Mukerjee
17. Shri P. S. Naskar
18. Shri Chhotubhai M. Patel
19. Shri Naval Prabhakar
20. Shri R. Ramanathan Chettiar
21. Shri Sham Lal Saraf
22. Dr. C. B. Singh
23. Shri K. K. Warior
24. Shri Balkrishna Wasnik
25. Shri Ram Sewak Yadav

Rajya Sabha

26. Shri Arjun Arora
27. Shri Vimalkumar M. Chordia
28. Shri R. S. Doogar
29. Shri D. P. Karmarkar
30. Shri P. K. Kumaran
31. Shri Shyamnandan Mishra
32. Shri Dahyabhai V. Patel
33. Shri Mulka Govinda Reddy
34. Dr. M. M. S. Siddhu
35. Shri Dalpat Singh
36. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS

Dr. J. M. Hunck, *Chief Editor, Handelsblatt, Duesseldorf, West Germany.*

2. The Committee heard the evidence given by the witness named above.

3. A verbatim record of the evidence given was taken.

4. The Chairman informed the Committee that the Speaker had been pleased to permit them to visit some of the modern pharmaceutical units in the different regions of the country in groups; as desired by them. The Chairman announced that the Committee might divide themselves into three groups to visit the units at the following places during the next inter-session period:

- (i) Calcutta;
- (ii) Hyderabad, Madras and Bangalore; and
- (iii) Bombay, Baroda and Indore.

The Committee authorised the Chairman to put fifteen members in each of the three groups in case the number of members in any group exceeded that limit.

5. The Committee then adjourned to meet again on Thursday, the 3rd February, 1966 at 14.00 hours for hearing further oral evidence on the Bill.

 VIII

 Eighth Sitting

The Committee met on Thursday, the 3rd February, 1966 from 14.00 to 17.05 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

- 2. Seth Achal Singh
- 3. Shri Peter Alvares

4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Braj Behari Mehrotra
14. Shrimati Sharda Mukerjee
15. Shri P. S. Naskar
16. Shri Chhotubhai M. Patel
17. Shri Naval Prabhakar
18. Shri R. Ramanathan Chettiar
19. Shri Sham Lal Saraf
20. Dr. C. B. Singh
21. Dr. L. M. Singhvi
22. Shri K. K. Warior
23. Shri Ram Sewak Yadav

Rajya Sabha

24. Shri Arjun Arora
25. Shri Vimalkumar M. Chordia
26. Shri D. P. Karmarkar
27. Shri P. K. Kumaran
28. Shri Shyamnandan Mishra
29. Shri Mulka Govinda Reddy
30. Dr. M. M. S. Siddhu
31. Shri Dalpat Singh
32. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri B. N. Atrishi, O.S.D., *Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS

Dr. E. Jucker, *Incharge of Synthetic Research, Sandoz Ltd., Basle (Switzerland).*

2. Before the commencement of the proceedings, the Chairman drew the attention of the witness, Dr. E. Jucker, Incharge of Synthetic Research, Sandoz Ltd., Basle (Switzerland) to the reported Press Conference held by him on the 31st January, 1966 expressing his views on the merits of the Bill. While explaining the circumstances under which he met the Press, Dr. Jucker tendered a sincere apology for what had been attributed to him by the Press, whom he had met in connection with his proposed lecture before the Science Society of Delhi University.

3. The Committee then heard the evidence given by Dr. Jucker.

4. A verbatim record of the evidence given was taken.

5. The Chairman informed the Committee that the visits to the various pharmaceutical units in the country would be arranged sometime in the middle of May, 1966, and the detailed programme, when chalked out, would be circulated to the Members in due course.

6. The Committee decided to ask for an extension of time for the presentation of their Report upto the first day of the second week of the August-September, 1966 session of Lok Sabha. The Committee authorised the Chairman and, in his absence, Dr. C. B. Singh, to move the necessary motion in the House on Wednesday, the 16th February, 1966.

7. The Committee also decided to sit from the second Monday of June 1966 onwards for hearing further oral evidence on the Bill and from about the middle of July, 1966 onwards for taking up clause-by-clause consideration of the Bill.

8. The Committee then adjourned.

IX

Ninth Sitting

The Committee met on Thursday, the 17th February, 1966 from 16.30 to 17.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri P. C. Borooah
4. Sardar Daljit Singh
5. Shri Kashi Ram Gupta
6. Shri Madhavrao Laxmanrao Yadhav
7. Shri M. R. Masani
8. Shri Braj Behari Mehrotra
9. Shri P. S. Naskar
10. Shri Chhotubhai M. Patel
11. Shri R. Ramanathan Chettiar
12. Shri A. T. Sarma
13. Dr. C. B. Singh

Rajya Sabha

14. Shri Arjun Arora
15. Shri Shyamnandan Mishra
16. Dr. M. M. S. Siddhu.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. The Chairman mentioned to the Committee about the letter dated the 12th February, 1966, addressed to him by the Japanese Ambassador in India wherein it had been stated that the Government of Japan had decided to send two experts *viz.* Mr. M. Inoue, ex-Chairman of the Patent Agency, Government of Japan and Mr. Matsui of the Federation of Economic Organisation, who would represent Japan and explain its position before the Joint Committee and that they should be given an earliest possible opportunity to place their views before the Joint Committee. The Committee decided that they might be called to give evidence at 14.30 hours on Friday, the 18th March, 1966 and in the meantime, the Embassy might be asked by the Chairman to tell their home Government to forward the usual number of copies of the memorandum stating the views of these two experts for the information of the Committee.

3. The Chairman also apprised the Committee about the communication dated the 11th February, 1966 addressed to him by Prof. G. H. C. Bodenhausen, Director of the U.I.B.I.P., Geneva that he would be ready to meet the Committee on the 23rd April, 1966. The Committee decided to sit at 09.30 hours on that day to hear this witness.

The Committee then adjourned.

X

Tenth Sitting

The Committee met on Saturday, the 23rd April, 1966 from 09.30 to 12.15 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Shri Panna Lal Barupal
3. Shri Dinen Bhattacharya
4. Sardar Daljit Singh

5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri Kashi Ram Gupta
8. Shri Prabhu Dayal Himatsingka
9. Shri Braj Behari Mehrotra
10. Shri Bibudhendra Mishra
11. Shri P. S. Naskar
12. Shri R. Ramanathan Chettiar
13. Shri Sham Lal Saraf
14. Dr. C. B. Singh
15. Shri Balkrishna Wasnik

Rajya Sabha

16. Shri Arjun Arora
17. Shri Vimalkumar M. Chordia
18. Shri R. S. Doogar
19. Shri D. P. Karmarkar
20. Shri B. T. Kulkarni
21. Shri Dahyabhai V. Patel
22. Shri Mulka Govinda Reddy
23. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS

Prof. G. H. C. Bodenhausen, Director of United International Bureaux for the Protection of Intellectual Property (BIRPI), Geneva.

2. The Committee heard the evidence given by Prof. G. H. C. Bodenhausen, Director of United International Bureaux for the Protection of Intellectual Property (BIRPI), Geneva.

3. A verbatim record of the evidence given was taken.

4. The Committee agreed to the requests made by the following parties to give oral evidence before them:—

- (i) Major General S. S. Sokhey; and
- (ii) Sarvashri G. M. Parikh and M. A. Pattani of Zandu Pharmaceutical Works Ltd., Bombay.

5. The Committee then considered their tour programme. The Chairman informed the Committee that since there were not many units in the South for one Group of the Committee to visit, the Committee might be divided into two Groups only *viz.* (i) visiting the units in the Bombay region (Bombay, Baroda and Poona) and the other at Calcutta and the Pfizer's Plant at Chandigarh (this was to be arranged on a convenient day when the Committee next hold their sittings). The programme as approved is set forth at annexures I & II.

The Committee also decided at the instance of the Drug Controller (Shri S. K. Borkar) to include two or three small scale pharmaceutical units in Bombay in their itinerary. He undertook to intimate their particulars.

6. Referring to the earlier decision to restrict the number of members joining each Group to 15, the Chairman announced that now that only two Groups were being constituted, this number might be restricted to 22. The Chairman was authorised to exercise his discretion to regulate this number.

7. The Committee also authorised the Chairman to visit the TATA Chemical Works at Mithapore (Gujarat) to study the application of the process patents envisaged in the Bill instead of products patents in respect of B.H.C. etc. manufactured by this Unit. The Chairman was to nominate 2 or 3 members to accompany him during this visit. It was also decided that an officer of the Secretariat should accompany this group. The date for the visit was to be determined by the Chairman.

8. The Committee then considered their future programme of work.

It was decided to sit daily from 09.30 to 13.00 hours and again from 15.00 to 17.00 hours from the 1st July, 1966 onwards (for a fortnight or less, if possible) to hear oral evidence of the witnesses—both foreign and Indian. It was decided that foreign witnesses should be given about two hours each and the Indian witnesses about one and a half hours each for giving evidence. The Chairman appealed to the members to be brief in their examination and thus help in completing the recording of evidence within this period. The Committee authorised the Chairman to draw up the programme of the sittings and have it circulated to them.

9. The Committee also tentatively agreed to sit from the 25th July, 1966 onwards to take up clause-by-clause consideration of the Bill.

10. The Committee then adjourned.

ANNEXURE I

(See Para 5 of the Minutes dt. 23-4-1966)

GROUP I

TOUR PROGRAMME OF VISITS TO PHARMACEUTICAL FACTORIES IN BOMBAY REGION

Sunday, the 5th June, 1966

Members to assemble at Bombay (exact place to be notified later).

Monday, the 6th June, 1966

F.N.—Zandu Pharmaceutical Works Ltd., Bombay.

A.N.—CIPLA, Bombay.

Tuesday, the 7th June, 1966.

F.N. Glaxo Laboratories, Bombay.

A.N. (i) CIBA RESEARCH CENTRE, Bombay.

(ii) Haffkine Institute, Bombay.

Wednesday, the 8th June, 1966.

F.N. Merck Sharp and Dohme, Bombay.

A.N. HOECHST Pharmaceuticals, Bombay.

Dep: for Baroda by the Gujrat Mail at 21.40 hrs.

Thursday, the 9th June, 1966.

Arr: Baroda at 4.22 hrs.

F.N. Alembic Chemicals, Baroda.

A.N. Sarabhai. Chemicals, Baroda.

Friday, the 10th June, 1966.

Dep: for Bombay Central By Gujrat Mail at 0.6 hrs.

Arr: Bombay Central at 5.55 hrs.

F.N. Sandoz, Bombay.

A.N. Unichem Laboratories, Bombay.

4 P.M. Discussion with the Controller General of Patents and Designs and Trade Marks, Bombay.

Saturday, the 11th June, 1966.

Dep: Bombay V.T. for Pimpri (Poona) by 305 Dn. Deccan Express at 7.10 hrs.

Arr: Poona 11.5 hrs.

Visit to the Hindustan Antibiotics Ltd., Pimpri (Poona).

DISPERSAL AT POONA

Note: This Group will also visit 2-3 small scale pharmaceutical units in Bombay. Their particulars will be intimated separately.

ANNEXURE II

(See Para 5 of the Minutes dt. 23-4-1966)

GROUP II

Tour Programme of visits to Pharmaceutical Factories/Works in Calcutta and Chandigarh**

Sunday, the 12th June, 1966.

Members to assemble at Calcutta.

(Exact place to be notified later) may be Central Government Guest House, Nizam's Palace.

Monday, the 13th June, 1966.

F.N. Bengal Chemicals, Calcutta.

A.N. Bengal Immunity, Calcutta.

**Visit to the Pfizer's basic manufacturing factory at Chandigarh will be arranged after the Joint Committee conclude their first round of sittings to be held in July, 1966.

Tuesday, the 14th June, 1966.

F.N. Standard Pharmaceuticals, Calcutta.

A.N. Smith Stanistreet, Calcutta.

Wednesday, the 15th June, 1966.

F.N. Martin & Harris, Calcutta.

A.N. Dey's Medical Stores, Calcutta.

Thursday, the 16th June, 1966.

F.N. East India Pharmaceutical Works, Calcutta.

A.N. Ayurvedic Units—(i) DABAR (ii) Kavi Raj N. N. Sen.

Friday, the 17th June, 1966.

Discussion with Joint Controller of Patents and Designs and the President, Technical Society of Patents.

Saturday, the 18th June, 1966.

Dispersal at Calcutta.

**Visit to the Pfizer's Basic manufacturing factory at Chandigarh will be arranged after the Joint Committee conclude their first round of sittings to be held in July, 1966.

XI

Eleventh Sitting

The Committee met on Friday, the 1st July, 1966 from 09.30 to 13.15 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Bibhuti Mishra
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh

11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Braj Behari Mehrotra
14. Shri Bibudhendra Mishra
15. Shrimati Sharda Mukerjee
16. Shri Naval Prabhakar
17. Shri Sham Lal Saraf
18. Shri A. T. Sarma
19. Dr. C. B. Singh
20. Shri P. Venkatasubbaiah
21. Shri K. K. Warior
22. Shri Balkrishna Wasnik
23. Shri Ram Sewak Yadav

Rajya Sabha

24. Shri P. K. Kumaran
25. Shri Shyamnandan Mishra
26. Shri Mulka Govinda Reddy
27. Shri Dahyabhai V. Patel
28. Dr. M. M. S. Siddhu
29. Shri Dalpat Singh
30. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D., Ministry of Industry.*
2. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS

National Foreign Trade Council Inc. 10, Rockefeller, Plaza,
NEW YORK.

Mr. Leonard J. Robbins.

2. The Committee heard the evidence given by the witness mentioned above.

3. A verbatim record of the evidence given was taken.

4. The Chairman then informed the Joint Committee that the Business Council for International Understanding, New York, having intimated that they would not be able to come on the 2nd July, 1966 to give evidence before the Joint Committee, as there was very little time for them to undertake the journey, he had agreed to their representative being heard by the Committee on the 14th July, 1966. As a result of this, there would now be left only one party which would be coming up before the Committee on the 2nd July, 1966, viz. The Chamber of Commerce of the United States of America, Washington. This party, the Chairman added, had been asked to come at 10.00 hours on the 2nd July, 1966 instead of at 11.30 hours, as originally scheduled.

5. The Chairman also informed the Joint Committee that Dr. Guido Zerilli-Marimo who was to come with Prof. Gino Bergami from Italy on the 5th July, 1966 had intimated that he had met with an accident and that he would not be able to undertake the journey. In his place, Dr. Giorgio Delgiudice would be coming.

6. The Committee were apprised of the proposed visit by the Study Group II to the Pfizer's Basic Manufacturing Plant at Chandigarh (as earlier decided) on the 16th July, 1966.

7. The Chairman also informed the Joint Committee that on a suggestion being made by some members, a visit to the Hamdard Dawakhana Drug Manufacturing and Research Unit in Delhi was being arranged at 16.00 hours on Monday, the 4th July, 1966.

8. The Committee then ajourned till 10.00 hrs., the 2nd July, 1966.

XII

Twelfth Sitting

The Committee met on Saturday, the 2nd July, 1966 from 10.00 to 12.45 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh

3. Shri Peter Alvares

4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Bibhuti Mishra
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Braj Behari Mehrotra
14. Shri Bibudhendra Mishra
15. Shrimati Sharda Mukerjee
16. Shri Naval Prabhakar
17. Shri Sham Lal Saraf
18. Shri A. T. Sarma
19. Dr. C. B. Singh
20. Dr. L. M. Singhvi
21. Shri P. Venkatasubbaiah
22. Shri K. K. Warior
23. Shri Balkrishna Wasnik
24. Shri Ram Sewak Yadav

Rajya Sabha

25. Shri B. T. Kulkarni
26. Shri P. K. Kumaran
27. Shri Shyamnandan Mishra
28. Shri Dahyabhai V. Patel
29. Shri Mulka Govinda Reddy
30. Shri M. R. Shervani
31. Shri Dalpat Singh
32. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

Chamber of Commerce of the United States of America,
Washington.

Prof. Maurice D. Kilbridge

2. The Committee heard the evidence given by the witness mentioned above.

3. A verbatim record of the evidence given was taken.

4. The Chairman informed the Committee about the communication received from the Directorate of Research Coordination and Industrial Liaison, C.S.I.R., New Delhi, wherein they had stated that Dr. S. H. Zaheer, D.G., C.S.I.R., and Shri Baldev Singh, who were to appear before the Committee on the 8th July, 1966, would be both out of station on that day, the Committee might agree to permit Dr. K. Ganapathi, Director, Regional Research Laboratory, Jammu, alongwith Shri R. B. Pai on behalf of the C.S.I.R. to appear before them instead. The Committee did not agree to the request and decided that they should be asked to intimate the next date which would be convenient to them.

5. The Committee then adjourned till 09.30 hours on Monday, the 4th July, 1966.

 XIII

Thirteenth Sitting

The Committee met on Monday, the 4th July, 1966 from 09.55 to 13.30 and again from 14.30 to 16.50 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh

3. Shri Peter Alvares

4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri R. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Braj Behari Mehrotra
14. Shri Bibudhendra Mishra
15. Shrimati Sharda Mukerjee
16. Shri Naval Prabakar
17. Shri A. T. Sarma
18. Dr. C. B. Singh
19. Shri P. Venkatasubbaiah
20. Shri Balkrishna Wasnik

Rajya Sabha

21. Shri Arjun Arora
22. Shri P. K. Kumaran
23. Shri Shyamnandan Mishra
24. Shri Dalpat Singh
25. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

1. Association of Chemical Industry in West Germany.

1. George Albrechtskirchinger.

2. Dr. Ulrich Heubaum.

II. Centre European Des Federations De L'—Industrie Chimique Bureau, ZURICH.

1. Mr. R. A. Willens, Head of the Patent Department of Shell Chemicals, London.

2. Mr. J. Egli, Director of the Swiss Society of Chemical Industries.

3. Mr. Haslam, Head of the Patent Department Wellcome Foundation Ltd., London.

4. Mr. D. H. Nowotny, Delegate of Swiss Society of Chemical Industries, Zurich.

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. Before proceeding to give evidence, Mr. J. Egli, leader of the representatives of the Swiss Society of Chemical Industries (Centre European Des Federations De L' Industrie Chimique Bureau, ZURICH expressed his sincere thanks to the Joint Committee of Parliament of India for giving him this opportunity of participating at their hearings. He added that he was extremely impressed by the manner in which the Chairman of the Committee had organised these hearings. It was very rare in the world that a Parliamentary Committee was receiving foreigners to testify before them. For this very great generosity of the Committee, he expressed his admiration and his sincere thanks. He further added that he very much appreciated this gesture of a great Democratic Country like India to have given him an opportunity to give evidence before the Committee.

The Committee then adjourned till 9.30 hours on Tuesday, the 5th July, 1966.

XIV

Fourteenth Sitting

The Committee met on Tuesday, the 5th July, 1966 from 09.30 to 13.00 and again from 15.00 to 17.15 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri M. R. Masani
14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
16. Shri Naval Prabhakar
17. Shri R. Ramanathan Chettiar
18. Shri A. T. Sarma
19. Dr. C. B. Singh
20. Dr. L. M. Singhvi
21. Shri P. Venkatasubbaiah
22. Shri Balkrishna Wasnik
23. Shri Ram Sewak Yadav

Rajya Sabha

24. Shri Arjun Arora
25. Shri Vimalkumar M. Chordia
26. Shri P. K. Kumaran
27. Shri Shyamnandan Mishra
28. Shri Dalpat Singh

29. Shri R. P. Sinha
30. Shri B. T. Kulkarni

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chagla—*Deputy Secretary.*

WITNESSES

- I. 1. Prof. Gino Bergami, Director, Institute DI FISILOGIA UMANA UNIVERSITA (NAPALES).
2. Dr. Giorgio Delgiudice, Leodoga SPA Lepetit, Via ANDREA VESALIO 6, ROME. (Assistant by Mr. Gabriel Brohamasha as Interpreter).
- II. Japan Pharmaceutical Manufacturers, Association, Japan Pharmaceutical, Medical and Dental Supply Exporters' Association and Federation of Economic Organizations, Tokyo.
 1. Mr. Shoji Matsui, *Patent Attorney.*
 2. Mr. Shoichi Inoue, *Senior Managing Director, (Assistant by Sardar Hem Singh, as Interpreter).*

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. At the outset, Prof. Bergami stated that he would wish to pay his most hearty compliment to the Chairman and the Members of the Joint Committee for their readiness to hear the views of experts from other countries. This was a unique and excellent approach by the Parliament of India knowing as he did the Parliaments of many other countries.

This showed in a very impressive manner, how liberal democratic and progressive the Parliamentary institution in India was. He added that he and his colleague had nothing but admiration for the manner in which Government and people of India had recently faced the stupendous problem that was before the country. He further added that he did not represent any special interest nor any industrial enterprise and his only interest was the welfare of the people of India.

5. Messrs. Shoji Matsui and Shoichi Inoue of Japan also expressed their appreciation of the manner in which they had been treated by the Committee.

6. The Committee then adjourned till 09.30 hours on Wednesday, the 6th July, 1966.

XV Fifteenth Sitting

The Committee met on Wednesday, the 6th July, 1966 from 09.30 to 13.00 and again from 15.00 to 15.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Panna Lal Barupal
5. Shri Dinen Bhattacharya
6. Shri Bibhuti Mishra
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri M. R. Masani
14. Shri Braj Behari Mehrotra
15. Shri Bibhudhendra Mishra
16. Shri Naval Prabhakar

17. Shri R. Ramanathan Chettiar
18. Shri A. T. Sarma
19. Dr. C. B. Singh
20. Dr. L. M. Singhvi
21. Shri P. Venkatasubbaiah
22. Shri Balkrishna Wasnik
23. Shri Ram Sewak Yadav

Rajya Sabha

24. Shri Babubhai M. Chinai
25. Shri Vimalkumar M. Chordia
26. Shri P. K. Kumaran
27. Shri Shyamnandan Mishra
28. Shri Dalpat Singh
29. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

Shri K. V. Venkatachalam, *O.S.D.*

2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

- I. The Indian Merchants Chamber, Bombay.
 1. Dr. R. C. Cooper—*Vice-President.*
 2. Shri P. A. Narielwala, *Member.*
 3. Shri C. L. Gheevala, *Secretary.*
- II. Trade Marks Owners Association of India.
 1. Shri S. H. Gursahani, *Chairman.*
 2. Shri R. A. Shah, *Solicitor.*
 3. Shri C. K. R. Rao, *Secretary.*

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. The Committee then discussed their future programme re: clause-by-clause consideration of the Bill. One view was that the Bill as reported by the committee should be passed by the House during the next session, as the winter session of Parliament would not only be over crowded but also of a short duration, and it might not be possible to get through this Bill, which might ultimately lead to the lapse of the Bill—the term of the current Lok Sabha would be over shortly after the winter session. Another view was that members should be given adequate time to digest the evidence in view of the intricacies and complexities of this Bill. They were all set against the Bill being rushed through. It was suggested that the Committee should sit for a week or ten days in early October to take up clause-by-clause consideration of the Bill. After some discussion, it was decided that the Chairman might discuss the matter with the Minister of Parliamentary Affairs and ascertain from him whether Government hoped to ensure passage of this Bill during the next Session or in case it could not be brought up in that Session, it could be passed for certain during the Winter Session so that all the labours of the Committee did not become infructuous.

Further consideration of this issue was, therefore, deferred.

5. The Committee noted that the three Witnesses representing the Indian Drugs Manufacturers Association, Bombay, who were to appear before the Committee, had not turned up.

The Committee then adjourned till 9.30 hours on Thursday, the 7th July, 1966.

XVI

Sixteenth Sitting

The Committee met on Thursday, the 7th July, 1966 from 09.50 to 13.40 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh

3. Shri Peter Alvares

4. Shri Panna Lal Barupal
5. Sardar Daljit Singh
6. Shri Basanta Kumar Das
7. Shri V. B. Gandhi
8. Shri H. K. V. Gowdh
9. Shri Kashi Ram Gupta
10. Shri Madhavrao Laxmanrao Jadhav
11. Shri Braj Behari Mehrotra
12. Shri Naval Prabhakar
13. Shri A. T. Sarma
14. Dr. C. B. Singh
15. Dr. L. M. Singhvi
16. Shri Ram Sewak Yadav.

Rajya Sabha

17. Shri Babubhai M. Chinai
18. Shri Vimalkumar M. Chordia
19. Shri P. K. Kumaran
20. Shri Shyamnandan Mishra
21. Shri Dalpat Singh
22. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF THE MINISTRY OF HEALTH

1. Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES . .

- I. Indian Pharmaceutical Association, Bombay.
 1. Mr. K. C. Chatterjee, *Vice-President.*
 2. Dr. J. N. Banerjee, *General Secretary.*

H. *Bundesverband Der Pharmazeutischen & Industries, F.V.,
Frankfurt Am Main, West Germany.

1. Mr. Curt Engelhorn, *President*.
2. Dr. Scholl, *Adviser*.
2. The Committee heard the evidence given by the witnesses mentioned above.
3. A verbatim record of the evidence given was taken.
4. The Committee then adjourned till 09.30 hours on Friday, the 8th July, 1966.

*Association of the German Pharmaceutical Industry, Frankfurt
AM MAIN.

XVII

Seventeenth Sitting

The Committee met on Friday, the 8th July, 1966 from 09.40 to 13.05 and again from 15.30 to 17.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Panna Lal Barupal
5. Sardar Daljit Singh
6. Shri Basanta Kumar Das
7. Shri V. B. Gandhi
8. Shri H. K. V. Gowdh
9. Shri Kashi Ram Gupta
10. Shri Madhavrao Laxmanrao Jadhav
11. Shri Braj Behari Mehrotra
12. Shri Naval Prabhakar
13. Shri A. T. Sarma
14. Dr. C. B. Singh
15. Shri Ram Sewak Yadav.

Rajya Sabha

16. Shri Arjun Arora
17. Shri Babubhai M. Chinai
18. Shri Vimalkumar M. Chordia
19. Shri D. P. Karmarkar
20. Shri P. K. Kumaran
21. Shri Shyamnandan Mishra
22. Shri Dahyabhai V. Patel
23. Shri Mulka Govinda Reddy
24. Shri Dalpat Singh
25. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

I. Neo-Pharma Industries, Bombay.

1. Shri N. L. I. Mathias, *Director.*
2. Shri A. C. Mitra.

II Haffkine Institute, Bombay.

1. Dr. H. I. Jhala, *Asstt. Director.*
2. Dr. C. V. Deliwala, *Asstt. Director.*

III. Mr. J. F. Monnet, Chambre Sandicale Nationale des Fabricants de Products, Pharmaceutiques; 88. Rue de la Faisanderie, Paris—16.

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. The discussion with the representatives of M/s. Neo Pharma Industries, Bombay, was to a large extent centered on the research aspect to ensure that the consumer was benefited by the incentives to industrialisation by the privileges and rights granted to an inventor under the Patents Law. The evidence showed an appalling lack of incentives on the part of the Indian Pharma manufacturers to invest some of their surpluses in research both in the matter of development of old drugs and discovery of new drugs for the benefit of the community. This aspect was brought to fore on the previous day also when the representatives of the Indian Pharma Association appeared before the Committee. The Committee, therefore, decided to visit the following Drug Research Institutes on the dates noted against each so as to acquaint themselves as to how things were going on in these Institutes which were run and managed by the Council of Scientific and Industrial Research:—

(i) Central Drug Research Institute, Lucknow, (Saturday, the 6th August, 1966).

(ii) Drug Research Institute, Jammu (recently taken over by CSIR).—Saturday, the 20th August, 1966.

The Committee decided to divide themselves into two Groups for visiting the two above mentioned Institutes. The Committee authorised the Chairman to regulate the number of members in each group which was not to exceed 22.

5. The Committee then decided to sit on Friday, the 12th August, 1966 from 14.00 hours onwards to hear the evidence of the following parties, which could not be taken up during their current session, and thus conclude their evidence taking part of the business:—

(i) 14.00 hrs. to 15.30 hrs.—Incorporated Law Society of Calcutta.

(ii) 15.30 hrs. onwards—Director General, Council of Scientific and Industrial Research.

Mr. J. F. Monnet thanked the Chairman and members of the Committee for having given him an opportunity to appear before them. This, he said, was not only a great honour to his own person

but he considered it a homage to his country which has had good and friendly relations with India in the past and which would certainly be reinforced in the future. He added that he had been particularly sensible to the fact that the Committee had taken a decision to give a hearing to the foreign witnesses on a matter of national importance on which others should not have any say. This, he said, was the privilege of great nations and the privilege of great democracies to be able to take such decisions. Continuing he said that he had not seen any similar decisions being taken in the world except in the U.S.A. as far back as in 1945, when he had an opportunity to be called there at a hearing on a Bill for extension of priority rights for patents that had been lapsing during the last war. The decision of the Committee to send for foreign witnesses, according to him, was the first of its kind and for that he paid his respects to the Committee and to the Indian Parliament.

The Committee then adjourned till 9.00 hours on Monday, the 11th July, 1966.

XVIII

Eighteenth Sitting

The Committee met on Monday, the 11th July, 1966 from 09.40 to 13.20 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Aachal Singh
3. Sardar Daljit Singh
4. Shri Basanta Kumar Das
5. Shri V. B. Gandhi
6. Shri H. K. V. Gowdh
7. Shri Kashi Ram Gupta
8. Shri Prabhu Dayal Himatsingka
9. Shri Madhavrao Laxmanrao Jadhav
10. Shri Braj Behari Mehrotra
11. Shri Chhotubhai M. Patel

12. Shri Naval Prabhakar
13. Shri R. Ramanathan Chettiar
14. Shri A. T. Sarma
15. Dr. C. B. Singh
16. Dr. L. M. Singhvi
17. Shri K. K. Warior
18. Shri Balkrishna Wasnik
19. Shri Ram Sewak Yadav.

Rajya Sabha

20. Shri Vimalkumar M. Chordia
21. Shri Shyamnandan Mishra
22. Shri Dahyabhai V. Patel
23. Shri Mulka Govinda Reddy
24. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department—Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

- I. Dr. T. R. Govindachari, *Director.*
CIBA Research Centre, Goregaon, Bombay.
- II. All India Drugs & Pharmaceuticals Manufacturers' Consultative Committee, Bombay.
 1. Dr. Gurbax Singh, *Leader.*
 2. Shri G. M. Parikh
 3. Shri R. Ganesan
 4. Shri B. S. Giri.

III. All India Manufacturers' Organisation, Bombay.

1. Shri Hansraj Gupta, *Leader*
 2. Shri G. M. Parikh
 3. Shri B. S. Giri
 4. Shri R. Ganesan
 5. Dr. Gurbax Singh
- } Members of the Central Committee.

IV. Sarvashri G. M. Parikh,

H. J. Vaidya and S. C. Nanabhai,
Zandu Pharmaceutical Works Ltd.,
Bombay.

2. The Committee heard the evidence given by the witnesses mentioned above. The evidence of the parties at S. Nos. II to IV was heard together at their request.

3. A verbatim record of the evidence given was taken.

4. At the outset, Shri R. P. Sinha, a member of the Committee, pointed out that the Minister-in-charge of the Bill, Shri D. Sanjivayya did not so far attend any sitting of the Committee. The other Minister, Shri Bibudhendra Mishra, too was not present. Shri P. S. Naskar also did not attend any of the sittings during the current session of the Committee. It was also pointed out that Shri Naskar being now the Deputy Home Minister was not concerned with the subject matter of the Bill any longer. The Chairman mentioned that he had already written a D. O. letter to the Minister-in-charge requesting him to make it convenient to attend the sittings of the Joint Committee. Shri Bibudhendra Mishra, who had gone to Bangalore to attend the Small Scale Industries Board meeting had taken his prior permission to be absent from the sittings of the Committee last week.

XIX

Nineteenth Sitting

The Committee met on Tuesday, the 12th July, 1966 from 09.30 to 13.10 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri P. C. Borooah
4. Sardar Daljit Singh
5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri Kashi Ram Gupta
8. Shri Madhavrao Laxmanrao Jadhav
9. Shri Braj Behari Mehrotra
10. Shri Bibudhendra Mishra
11. Shri Chhotubhai M. Patel
12. Shri Naval Prabhakar
13. Shri R. Ramanathan Chettiar
14. Shri A. T. Sarma
15. Dr. C. B. Singh
16. Shri K. K. Warior
17. Shri Balkrishna Wasnik
18. Shri Mathew Maniyangadan

Rajya Sabha

19. Shri Arjun Arora
20. Shri Vimalkumar M. Chordia
21. Shri Shyamnandan Mishra
22. Shri Dahyabhai V. Patel
23. Shri Mulka Govinda Reddy
24. Shri M. R. Shervani
25. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, Deputy Draftsman, Legislative Department, Ministry of Law.

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

I. Indian Chamber of Commerce,
Calcutta.

1. Shri B. P. Khaitan
2. Shri B. Kalyanasundaram.

II. Associated Chambers of Commerce and Industry of India,
Calcutta.

1. Mr. C. A. Pitts
2. Mr. A. B. Parakh
3. Mr. I. Mackinnon

III. Bengal Chemists and Druggists Association, Calcutta.

1. Shri P. K. Guha
2. Shri T. K. Ghosh.

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. On a question being raised whether it would be possible for Government to allocate time during the next session to have the Bill as reported by the Joint Committee pushed through both Houses of Parliament, Chairman asked the Minister of State in the Ministry of Industry, Shri Bibudhendra Mishra, to ascertain the present position from the Minister of Parliamentary Affairs and to apprise the Committee of the same so that the latter could adjust their programme accordingly. The Chairman, however, pointed out that as earlier decided they had to sit on the 12th August, 1966 to examine two residuary witnesses viz. (i) Incorporated Law Society of Calcutta and (ii) Director General, Council of Scientific & Industrial Research

and thereafter, as suggested by the members today, the following further witnesses had to be examined:—

- (i) Dr. B. Shah, Industrial Advisor, Director General of Technical Development, Government of India, New Delhi;
- (ii) Director, Central Drug Research Institute, Lucknow;
- (iii) Drug Controller, Government of India, New Delhi;
- (iv) Controller General of Patents and Designs, Government of India, Bombay; and
- (v) Joint Controller of Patents and Designs Office, Calcutta.

Further discussion on this issue was deferred till the Committee were informed of the outcome of the discussion which the Minister of State in the Ministry of Industry was asked to have with the Minister of Parliamentary Affairs.

The Committee then adjourned till 09.30 hours on Wednesday, the 13th July, 1966.

XX

Twentieth Sitting

The Committee met on Wednesday, the 13th July, 1966 from 09.30 to 13.05 hours and again from 17.10 to 18.20 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Bibhuti Mishra
7. Shri P. C. Borooah
8. Sardar Daljit Singh
9. Shri Basanta Kumar Das
10. Shri V. B. Gandhi
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri Braj Behari Mehrotra

15. Shri Bibudhendra Mishra
16. Shrimati Sharda Mukerjee
17. Shri Chhotubhai M. Patel
18. Shri Naval Prabhakar
19. Shri R. Ramanathan Chettiar
20. Shri A. T. Sarma
21. Dr. C. B. Singh
22. Shri K. K. Warior
23. Shri Balkrishna Wasnik

Rajya Sabha

24. Shri Arjun Arora
25. Shri Vimalkumar M. Chordia
26. Shri P. K. Kumaran
27. Shri Shyamnandan Mishra
28. Shri Mulka Govinda Reddy
29. Shri M. R. Shervani
30. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Pericastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

Shri T. Durairajan, *Dollar Company, Madras.*

II. Pharmaceutical Manufacturers' Organisation, Ahmedabad.

1. Shri Hasmukhlal C. Shah
2. Shri I. A. Modi.

III. Gujarat Vepari Mahamandal, Ahmedabad.

1. Shri Charandas Haridass, Vice-President.
2. Shri Chandulal Premchand, Ex-President.
3. Shri J. T. Trivedi.

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. Before the representatives of the Gujarat Vepari Mahamandal, Ahmedabad, proceeded to give their evidence, they expressed their regret for their late arrival which they explained was due to the unusual late running of the train.

The Committee then adjourned till 09.30 hours on Thursday, the 14th July, 1966.

XXI

Twenty-first Sitting

The Committee met on Thursday, the 14th July, 1966 from 09.30 to 13.20 hours and again from 15.00 to 17.10 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

1. Shri Peter Alvares
2. Shri Ramchandra Vithal Bade
3. Shri Panna Lal Barupal
4. Shri Bibhuti Mishra
5. Sardar Daljit Singh
6. Shri Basanta Kumar Das

8. Shri V. B. Gandhi
9. Shri Kashi Ram Gupta
10. Shri Madhavrao Laxmanrao Jadhav
11. Shri Mathew Maniyangadan
12. Shri Bibudhendra Mishra
13. Shrimati Sharda Mukerjee
14. Shri Chhotubhai M. Patel
15. Shri Naval Prabhakar
16. Shri R. Ramanathan Chettiar
17. Shri Sham Lal Saraf
18. Shri A. T. Sarma
19. Dr. C. B. Singh
20. Shri K. K. Warior
21. Shri Balkrishna Warnik

Rajya Sabha

22. Shri Arjun Arora
23. Shri Vimalkumar M. Chordia
24. Shri D. P. Karmarkar
25. Shri P. K. Kumaran
26. Shri Shyamnandan Mishra
27. Shri Mulka Govinda Reddy
28. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Députy Secretary.*

WITNESSES

I. Pharmacy Council of India, New Delhi.

1. Dr. S. Rohatgi
2. Dr. P. K. Sanyal
3. Dr. S. B. Rao
4. Shri Devinder K. Jain.

II. Fédération of Indian Chambers of Commerce and Industry, New Delhi.

1. Shri Ramanbhai B. Amin—President.
2. Shri L. S. Dávar
3. Shri C. H. Desai
4. Shri N. Krishnamurthi

III. Dr. V. B. Ch'palkatti, Director, Shri Ram Institute for Industrial Research, Delhi.

I. Business Council for International Understanding, New York.

Mr. Robert Meagher

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. At the outset Shri R. P. Sinha raised the following issues:—

- (i) the Committee had so far concentrated their deliberations on the effects of the Bill on the Drug and Pharmaceutical Industry and they had not examined any witness from other fields of industry where Patents other than those for Drugs and Pharmaceuticals were either being used or exploited;
- (ii) chemical testing of a drug or medicine developed in India was a very complicated process and it took a very long time; and

- (iii) the targets laid down in the Third and Fourth Five Year Plans and their achievements, so far as the Third Five Year Plan was concerned, for the manufacture of intermediates used in the preparation or manufacture of any of the medicines or drugs.

The Chairman, however, ruled that due publicity about the submission of the Memoranda and the giving of oral evidence had been given. But as it was, no other industry came forward to present their views or express their difficulties. As the Drug Industry was primarily affected by the proposed provisions of the Bill inasmuch as it sought to reduce the term of the Patent from 16 to 10 years, it was that Industry from whom a majority of the Memoranda|Representations had been received. For the same reason, much of the evidence also came from that Industry. The Chairman made it clear that the Committee were solely concerned with the consideration of the Bill within the framework of the principles underlying it, which had been accepted by the House while referring the Bill to the Joint Committee, and not with the development of any Industry. This, he observed, was beyond the scope of the Bill.

5. Before Mr. Meagher proceeded to give his evidence, he thanked the Chairman and Members of the Committee for giving him an opportunity to appear before them. This he considered to be very extra-ordinary for a Committee of Parliament to permit foreigners like himself to come forth to place his views before them.

Before withdrawing on the conclusion of his evidence, Mr. Meagher once again thanked the Committee for the honour done to him in giving him an opportunity to place his views before them.

The Committee then adjourned till 09.30 hours on Friday, the 15th July, 1966.

XXII

Twenty-second Sitting

The Committee met on Friday, the 15th July, 1966 from 09.30 to 13.25 hours and again from 15.00 to 18.55 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares

4. Shri Ramchandra Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
12. Shri Kashi Ram Gupta
13. Shri Madhavrao Laxmanrao Jadhav
14. Shri Mathew Maniyangadan
15. Shri Braj Behari Mehrotra
16. Shri Bibudhendra Mishra
17. Shrimati Sharda Mukerjee
18. Shri Chhotubhai M. Patel
19. Shri Naval Prabhakar
20. Shri R. Ramananthan Chettiar
21. Shri Sham Lal Saraf
22. Shri A. T. Sarma
23. Dr. C. B. Singh
24. Dr. L. M. Singhvi
25. Shri P. Venkatasubbaiah
26. Shri Balkrishna Wasnik

Rajya Sabha

27. Shri Arjun Arora
28. Shri Vimalkumar M. Chordia
29. Shri D. P. Karmarkar
30. Shri P. K. Kumaran
31. Shri Shyamnandan Mishra
32. Shri Dahyabhai V. Patel
33. Shri Mulka Govinda Reddy
34. Shri M. R. Shervani
35. Dr. M. M. S. Siddhu
36. Shri Dalpat Singh
37. Shri R. P. Sinha

Shri M. R. Shervani: Cancellation of the patent. Everybody should be free to start the production.

Dr. K. A. Hamied: If he does not manufacture within two or three years, anybody can step in.

Shri K. V. Venkatachalam: There is provision for revocation also.

Shri M. R. Shervani: That is a different thing. If I hold a patent and I do not exploit it but sit tight on it, how long should I be allowed to sit tight because I do not want to take a risk and invest money. Should there not be a clause that the patent will be cancelled if the patentee does not within three or five or ten years or one year—whatever be the period—exploit that patent by starting a manufacturing organisation? If that is so what time should be put for the chemical or drug industry? Three years from the time of granting?

Dr. K. A. Hamied: At present there is no clause like that.

Shri K. V. Venkatachalam: There is clause 89(1).

Shri M. R. Shervani: It takes two years. Why not put an automatic provision that it should be considered after three years?

Dr. K. A. Hamied: Somebody must apply.

Shri K. V. Venkatachalam: Everything has to come within the process of law.

Dr. K. A. Hamied: With regard to these patents, it should not be a cognizable offence. Somebody has to write, saying, "so and so is holding patents for the last six or 10 years, and he is not using it. I am having a compulsory licence but I cannot proceed."

Shri M. R. Shervani: My next question is this. You said that if patented drugs are being imported, then their free import should be allowed, subject to the restrictions placed through import control, foreign exchange and so on.

Dr. K. A. Hamied: Yes; that is very important. If a gentleman or a firm is holding a patent, and is selling a kind of tablet or injection in which that material is being used, and he is not manufacturing that material in India, and he is importing it, by virtue of the patent, he is stopping me from importing it. So, he has the monopoly for importing it and selling it at any price he likes. That is a very important aspect.

Shri M. R. Shervani: Let us consider the interests of the Indian patentees; let alone the foreigners. There is a provision in the law which says that the Government, even for public undertakings in the State or the Central sphere, can utilise the patent without paying any compensation to anybody.

Shri K. V. Venkatachalam: I think there is a little confusion in this. There are really two clauses in the Bill; one refers to use by Government for non-commercial purposes, for its own use like giving it for hospitals and so on. There, no compensation or royalty is payable. This is in clause 48. Then there is another clause—clause 99 and 100 onwards—which refers to use of patent by Government and Government undertakings which are of a commercial nature. There, compensation has to be paid. If it is a public undertaking, it is not limited only to Government undertakings. For example, in the steel industry, it can apply to both the private sector undertakings and the public sector undertakings in that group. This provision is contained in sections 99 and other following sections.

Shri M. R. Shervani: What in your opinion should be the life of a patent? Should it be 10 years or should it be reduced or increased, particularly in regard to drugs and chemicals, and from when should the life start and from which stage?

Dr. K. A. Hamied: It so happens in India that an application is made for

the grant of a patent, but along with the application, the full specifications are not submitted by the applicant, and the applicant is given about one year to 15 months for submitting the complete specifications of the patent. Now, the period is 10 years, but it really becomes 11 years and three months, because one year is also given for submitting the specifications. So, the time given to him is not exactly 10 years but it is 11 years and more.

Shri K. V. Venkatachalam: In the new Bill, it is suggested that the period should be from the date when the complete specifications are filed before the Controller.

Dr. K. A. Hamied: From the date of application, it becomes 11 years. As soon as the application and the specifications are filed, the party concerned starts manufacture and he writes, "patent applied for" and so, nobody can copy that process. He has actually 11 years to exploit that patent, not from the time of selling the patent but from the time he submits or files his specification, and he can exploit it and nobody can copy it. He has just to mention "patent applied for." Even in respect of a machinery, they can do so.

Shri Atrishi: We cannot have a suit brought against him before the sealing of the patent because the rights accrue to the patentee only after the sealing of the patent.

Dr. K. A. Hamied: No. It cannot be copied. That is the rule in the present Act.

Shri M. R. Shervani: In the sphere of drugs and medicines, tests have to be gone through and the bad effects are observed and discovered. So, it is quite possible that 10 years may not be sufficient; eight years may go by before it is put into use, into commercial production. So, would you like to give power to the Government to extend the time in suitable cases?

Dr. K. A. Hamied: I think the Controller can give it as a concession to the patent-holder; if the patent-holder wants, under certain specific circumstances, saying that such and such a thing is not available and he could not utilise the patent and so the time must be extended by another two years, then, I think it should be allowed.

Shri D. P. Karmarkar: You said that 10 years would amount to 11 years. According to clause 45, you will see that every patent shall be dated as of the date on which the complete specification was filed—not when the original application was filed—but from the date on which the complete specification was filed. So, it would not be 11 or 15 years as the case may be. The effective date is from the date of the completion of the specification.

Dr. K. A. Hamied: Yes.

Shri P. K. Kumaran: You said that you are for the abrogation of the patent law for drugs, if possible. But in the absence of that, you prefer this process. Suppose, the patent law is abrogated completely, don't you think that the market will be flooded with so many drugs and in order to promote their sale in the market, the quality of the drugs would become inferior?

Dr. K. A. Hamied: The hon. Member is confusing the term "drug" with the term "chemical". For preserving the quality of the drugs, there is the Drug Control Order; nobody can make a sub-standard drug in India so long as the Drug Control Order is effective. But for chemicals, there is no such difficulty, because, the manufacturers who buy those chemicals are themselves so careful that they analyse the chemical before they buy it. I analyse all the chemicals from Europe and America before I put it in the market. It is about the medicines that you are talking; they are controlled by the Drug Controller. Nobody can buy and

Twenty-Third Sitting

The Committee met on Friday, the 12th August, 1966 from 14.00 to 16.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Bibhuti Mishra
4. Shri P. C. Borooah
5. Sardar Daljit Singh
6. Shri Basanta Kumar Das
7. Shri H. K. V. Gowdh
8. Shri Mathew Maniyangadan
9. Shri Braj Behari Mehrotra
10. Shri Bibudhendra Mishra
11. Shrimati Sharda Mukerjee
12. Shri P. S. Naskar
13. Shri Chhotubhai M. Patel
14. Shri R. Ramanathan Chettiar
15. Shri Sham Lal Saraf
16. Shri A. T. Sarma
17. Dr. C. B. Singh
18. Shri K. K. Warrior

Rajya Sabha

19. Shri T. Chengalvaroyan
20. Shri P. K. Kumaran
21. Shri Shyamnandan Mishra
22. Shri M. R. Shervani
23. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVE OF MINISTRY OF LAW

Shri R. V. S. Periastrri, *Deputy Legislative Council, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

1. Incorporated Law Society of Calcutta.

Shri B. P. Ray.

2. Council of Scientific and Industrial Research, New Delhi.

1. Dr. S. H. Zaheer, Director General, C.S.I.R. and Ex-officio Secretary to the Government of India, Ministry of Education.

2. Shri Baldev Singh, Industrial Liaison and Extension Officer, Directorate of Research Co-ordination & Industrial Liaison, C.S.I.R.

3. Shri R. B. Pai, Patents Officer, C.S.I.R.

2. The Committee heard the evidence given by the witnesses mentioned above.

3. A verbatim record of the evidence given was taken.

4. The Committee then adjourned till 14.30 hours on Friday, the 26th August, 1966.

XXIV

Twenty-Fourth Sitting

The Committee met on Friday, the 26th August, 1966 from 14.40 to 17.05 hours.

PRESENT.

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Shri Dinen Bhattacharya

3. Shri Bibhuti Mishra

4. Shri P. C. Borooah
5. Sardar Daljit Singh
6. Shri Basanta Kumar Das
7. Shri V. B. Gandhi
8. Shri Kashi Ram Gupta
9. Shri Prabhu Dayal Himatsingka
10. Shri Mathew Maniyangadan
11. Shri Bibudhendra Mishra
12. Shri Chhotubhai M. Patel
13. Shri Naval Prabhakar
14. Shri Sham Lal Saraf
15. Dr. C. B. Singh
16. Shri K. K. Warior
17. Shri Balkrishna Wasnik.

Rajya Sabha

18. Shri Babubhai M. Chinai
19. Shri D. P. Karmarkar
20. Shri Shyamnandan Mishra
21. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Potents, Designs and Trade Marks.*

REPRESENTATIVE OF MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVE OF MINISTRY OF LAW

Shri R. V. S. Perisastri, *Deputy Legislative Counsel, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

I. Directorate General of Technical Development, Government of India, New Delhi.

1. Dr. B. Shah, Industrial Adviser.
2. Dr. P. R. Gupta, Development Officer.
3. Dr. S. S. Gothoskar, Development Officer.

II. Dr. M. L. Dhar, Director, Central Drug Research Institute, Lucknow.

2. The Committee decided to sit from the 5th October, 1966 onwards to take up clause-by-clause consideration of the Bill and to sit for a week or ten days till the consideration of the Bill was completed whichever was earlier.

3. It was decided that notices of amendments to the Bill might be forwarded to the Lok Sabha Secretariat by the 1st October, 1966. The Committee desired that Government amendments should be accompanied with explanatory notes thereon.

4. The Committee then heard the evidence given by the witnesses mentioned above.

5. A verbatim record of the evidence given was taken.

6. The Committee then adjourned till 09.30 hours on Saturday, the 27th August, 1966.

XXV

Twenty-Fifth Sitting

The Committee met on Saturday, the 27th August, 1966 from 10.05 to 13.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Shri Bibhuti Mishra
3. Shri P. C. Borooah
4. Sardar Daljit Singh
5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri Kashi Ram Gupta
8. Shri Prabhu Dayal Himatsingka
9. Shri Madhavrao Laxmanrao Jadhav
10. Shri Mathew Maniyangadan
11. Shri Bibudhendra Mishra
12. Shri P. S. Naskar
13. Shri Chhotubhai M. Patel
14. Shri Sham Lal Saraf

15. Dr. C. B. Singh
16. Shri Balkrishna Wasnik.

Rajya Sabha

17. Shri Shyamnandan Mishra
18. Shri M. R. Shervani
19. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
3. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF MINISTRY OF LAW

- Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel,
Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES

- I. (1) Shri S. K. Borkar, Drug Controller, Government of India, New Delhi.
 - (2) Shri P. S. Ramachandran, Deputy Drug Controller, Government of India, New Delhi.
 - II. (1) Dr. A. Joga Rao, Controller General of Patents and Designs, Government of India, Bombay.
 - (2) Shri R. V. Pai, Joint Controller of Patents and Designs, Calcutta.
2. The Committee heard the evidence given by the witnesses mentioned above.
 3. A verbatim record of the evidence given was taken.
 4. The Committee then adjourned till 14.30 hours on Wednesday, the 5th October, 1966.

XXVI

Twenty-Sixth Sitting

The Committee met on Wednesday, the 5th October, 1966 from 14.30 to 15.45 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Shri Ramchandra Vithal Bade
3. Shri Panna Lal Barupal
4. Shri Bibhuti Mishra
5. Shri P. C. Borooah
6. Sardar Daljit Singh
7. Shri Basanta Kumar Das
8. Shri V. B. Gandhi
9. Shri H. K. V. Gowdh
10. Shri Kashi Ram Gupta
11. Shri Prabhu Dayal Himatsingka
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri M. R. Masani
15. Shri Braj Behari Mehrotra
16. Shri Bibudhendra Mishra
17. Shri P. S. Naskar
18. Shri Naval Prabhakar
19. Shri R. Ramanathan Chettiar
20. Shri A. T. Sarma
21. Dr. C. B. Singh
22. Shri K. K. Warior
23. Shri Ram Sewak Yadav.

Rajya Sabha

24. Shri Vimalkumar M. Chordia
25. Shri R. S. Doogar
26. Shri B. T. Kulkarni
27. Shri P. K. Kumaran
28. Shri Shyamnandan Mishra
29. Shri Dahyabhai V. Patel
30. Shri Mulka Govinda Reddy
31. Shri M. R. Shervani
32. Dr. M. M. S. Siddhu
33. Shri Dalpat Singh.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.

2. Dr. A. Joga Rao, *Controller General of Patents, Designs, and Trade Marks.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVES OF MINISTRY OF LAW

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department.*
2. Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. At the outset, the Committee decided to sit daily from 10.00 to 13.00 hours and again from 15.00 to 17.00 hours till the clause-by-clause consideration of the Bill was concluded.

3. The Committee then took up clause-by-clause consideration of the Bill.

4. *Clause 2:*

The following amendments were accepted—

- (1) Page 2. *for* lines 19 to 22,
substitute '(g) "food" means any substance intended for the use of babies, invalids or convalescents as an article of food or drink;'
- (2) Page 3, lines 31 and 32,
for "to the extent to which they are used" *substitute* "which are ordinarily used".
- (3) Page 4, *for* line 1, *substitute:*
'(m) "patent" means a patent granted under this Act and includes for the purposes of sections 44, 49, 50, 51, 52, 54, 55, 56, 57, 58, 63, 65, 66, 68, 69, 70, 78, 134, 140, 153, 154 and 156 and Chapters XVI, XVII and XVIII, a patent granted under the Indian Patents and Designs, Act, 1911;'
- (4) Page 4, lines 11 and 12,
for "established under"
substitute "referred to in"

Further consideration of the clause was held over.

5. The Committee then adjourned to meet again on Thursday, the 6th October, 1966 at 10.00 hours.

XXVII

Twenty-Seventh Sitting

The Committee met on Thursday, the 6th October, 1966 from 10.00 to 12.50 and again from 15.00 to 17.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramachandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
12. Shri H. K. V. Gowdh
13. Shri Kashi Ram Gupta
14. Shri Prabhu Dayal Himatsingka
15. Shri Madhavrao Laxmanrao Jadhav
16. Shri Mathew Maniyangadan
17. Shri M. R. Masani
18. Shri Braj Behari Mehrotra
19. Shri Bibudhendra Mishra
20. Shri P. S. Naskar
21. Shri Naval Prabhakar
22. Shri R. Ramanathan Chettiar
23. Shri A. T. Sarma
24. Dr. C. B. Singh
25. Shri K. K. Warior
26. Shri Balkrishna Wasnik.

Rajya Sabha

27. Shri Arjun Arora
28. Shri Vimalkumar M. Chordia
29. Shri R. S. Doogar
30. Shri P. K. Kumaran
31. Shri Shyamnandan Mishra
32. Shri Dahyabhai V. Patel
33. Shri M. R. Shervani
34. Dr. M. M. S. Siddhu
35. Shri Dalpat Singh.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*
3. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVES OF MINISTRY OF LAW

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department.*
2. Shri R. V. S. Perisastri, *Deputy Legislative Counsel, Legislative Department.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. The Committee resumed clause-by-clause consideration of the Bill.

3. *Clause 3:* The following amendment was accepted:—

Page 5, line 15, *omit* "a claim to"

The clause, as amended, was adopted.

4. *Clause 4:* The clause was adopted without amendment.

5. *Clause 5:* The following amendment was accepted:—

Page 6, for lines 7 to 9, *substitute*—

“the patent shall be granted only in respect of claims for the method or process of manufacture and in respect of claims for the substances when produced by such methods or processes”.

The clause as amended, was adopted.

6. *Clause 6:* The clause was adopted without amendment.

7. *Clause 7:* The following amendments were accepted:

(1) Page 6, for lines 32 to 37, *substitute*—

“prescribed after the filing of the application, proof of the right to make the application”.

(2) Page 7, line 5, after “such application,” insert “(not being a convention application)”.

The clause as amended, was adopted.

8. *Clauses 8 to 10.* The clauses were adopted without amendment.

9. *Clause 11:* The following amendment was accepted:—

Page 10, for lines 16 and 17, *substitute*—

“there has been a post-dating under section 9 or section 17 or, as the case may be, an ante-dating under section 16, be a reference to the date as so post-dated or ante-dated.”

The clause, as amended, was adopted.

10. *Clause 12:* The clause was adopted without amendment.

11. *Clause 13:*—The Committee decided to amend the clause in order to provide that the examiner shall complete his investigation of the application referred to him under section 12 ordinarily within a period of eighteen months.

The Legislative Counsel was asked to redraft the clause accordingly.

Subject to this, the clause was adopted.

12. *Clause 14*: The clause was adopted without amendment.

13. *Clause 15*: The following amendment was accepted:—

Page 12, for lines 13 to 20, *substitute*—

“(2) If it appears to the Controller that the invention claimed in the specification is not an invention within the meaning of, or is not patentable under, this Act, he shall refuse the application”.

The clause, was amended, was adopted.

14. *Clause 16*: The clause was adopted without amendment.

15. *Clause 17*: The following amendment was accepted:—

Page 13, for line 24, *substitute*—

“required to be amended under clause (b) of sub-”

The clause, was amended, was adopted.

16. *Clauses 18 to 20*: The clauses were adopted without amendments.

17. *Clause 21*: The following amendment was accepted:—

Page 17, for lines 1 to 31, *substitute*—

“(2) The period of fifteen months specified in sub-section (1) shall on request made by the applicant in the prescribed manner and before the expiration of the period so specified be extended for a further period so requested (hereafter in this section referred to as the extended period), so, however, that the total period for complying with the requirements, of the Controller does not exceed eighteen months from the date on which the objections referred to in sub-section (1) are forwarded to the applicant.

(3) If at the expiration of the period of fifteen months specified in sub-section (1) or the extended period—

(a) an appeal to the High Court is pending in respect of the application for the patent for the main invention, or

- (b) in the case of an application for a patent of addition, an appeal to the High Court is pending in respect of either that application or the application for the main invention,

the time within which the requirements of the Controller shall be complied with shall, on an application made by the applicant before the expiration of the said period of fifteen months or the extended period, as the case may be, be extended until such date as the High Court may determine.

- (4) If the time within which the appeal mentioned in sub-section (3) may be instituted has not expired, the Controller may extend the period of fifteen months, or as the case may be, the extended period, until the expiration of such further period as he may determine:

Provided that if an appeal has been filed during the said further period, and the High Court has granted any extension of time for complying with the requirements of the Controller, then, the requirements may be complied with within the time granted by the Court."

The clause, was amended, was adopted.

18. *Clause 22*: The following amendment was accepted:—

Page 13, line 1, for "sub-section (2)" substitute "sub-section (1)":

The clause, was amended, was adopted.

19. *Clauses 23 and 24*: The clauses were adopted without amendment.

20. *Clause 25*:—The following amendments were accepted:—

(1) Page 18,

(a) lines 30 and 31, for "of whom he is the legal representative", substitute "under or through whom he claims"

(b) line 34 for "claimed", substitute "of the claim".

(c) for lines 38, 39 and 40, *substitute*—

“(ii) in India or elsewhere, in any other document:

Provided that the ground specified in sub-clause (ii) shall not be available where such publication does not constitute anticipation by virtue of sub-section (2) or sub-section (3) of section 29”.

(2) Page 19,—

(a) line 6, for “was used”, *substitute* “was known or used”.

(b) line 10, for “used”, *substitute* “known or used”.

(c) line 12, after “date”, *insert* “except where such importation has been for the purpose of reasonable trial or experiment only”.

The clause, as amended, was adopted.

21. *Clause 26.*—The clause was adopted without amendment.

22. *Clause 27.*—The following amendments were accepted:—

Page 21,—

(i) lines 2 and 3, *omit* “in India or any other country”.

(ii) for lines 7, 8 and 9, *substitute*—

“(b) in any other document in India or elsewhere”.

(iii) for line 12, *substitute*—“his satisfaction:

Provided that the Controller shall not refuse to grant the patent on the ground specified in clause (b) if such publication does not constitute an anticipation of the invention by virtue of sub-section (2) or sub-section (3) of section 29”.

The clause, as amended, was adopted.

23. *Clauses 28 to 30.*—The clauses were adopted without amendment.

24. *Clause 31.*—The following amendments were accepted:—

(1) Page 23, line 42, after “inventor”, *insert* “of a person deriving title from him”.

(2) Page 24, line 11, after “inventor”, *insert* “or a person deriving title from him”.

The clause, as amended, was adopted.

25. *Clauses 32 to 35.*—The clauses were adopted without amendment.

26. *Clause 36.*—The following amendments were accepted:—

Page 26,—

(i) line 10, *after* “36”, *insert* “(1)”.

(ii) *for* lines 13 and 14, *substitute*—

“within nine months from the date of issue of such directions and thereafter at intervals not exceeding twelve months, and if, on”.

(iii) *after* line 19, *insert*—

“(2) The result of every consideration under sub-section (1) shall be communicated to the applicant within such time and in such manner as may be prescribed”.

The clause, as amended, was adopted.

27. *Clause 37.*—The following amendment was accepted:—

Page 26, *for* lines 36 and 37 *substitute*—

“(a) if, during the continuance in force of the directions, any use of the invention is made by or on behalf of, or to the order”.

The clause, as amended, was adopted.

28. *Clause 38.*—The clause was adopted without amendment.

29. *Clause 39.*—The following amendment was accepted:—

Page 27, line 28, *for* “eight weeks” *substitute* “six weeks”.

The clause, as amended, was adopted.

30. *Clauses 40 and 41.*—The clauses were adopted without amendments.

31. *Clause 42.*—The following amendments were accepted:—

Page 28,

(i) line 15, *omit* “or any department thereof”.

(ii) *for* line 17, *substitute*—

“under this Chapter should be made or whether an order so made should be revoked”.

The clause, as amended, was adopted.

32. *Clause 43.*—The following amendment was accepted:

Page 29, lines 19 and 20,

for “or such shorter period as may be prescribed”, *substitute*, “*in the aggregate*”.

The clause, as amended, was adopted.

33. *Clause 44.*—The clause was adopted without amendment.

34. *Clause 45.*—The following amendment was accepted:—

Page 30, for lines 1 to 4, *substitute*,—

“(3) Notwithstanding anything contained in this section, no suit or other proceedings shall be commenced or prosecuted in respect of an infringement committed before the date of advertisement of the acceptance of the complete specification”.

The clause, as amended, was adopted.

35. *Clauses 46 and 47.*—The clauses were adopted without amendment.

35A. *New Clause 47A.*—Discussion on the proposed new clause 47A was held over.

36. *Clause 48.*—The following amendments were accepted:—

(i) Page 30, lines 34 and 35, for “which may be specified by the Central Government in this behalf by notification in the Official Gazette”, *substitute* “which, the Central Government may, having regard to the public service that such dispensary, hospital or medical institution renders, specify in this behalf by notification in the Official Gazette”.

(ii) Page 31, lines 6 and 7, for “conferred on the patentee by this Act”, *substitute* “conferred on the patentee by this Act in respect of a patent granted, whether before or after the commencement of this Act.”

The clause, as amended, was adopted.

37. *Clause 49.*—The clause was adopted without amendment.

38. *Clause 50.*—The following amendment was accepted:—

Page 31, for lines 36 to 41, *substitute*—

“(3) Subject to the provisions contained in this section and in section 51 and to any agreement for the time being in force, where two or more persons are registered as

grantee or proprietor of a patent then, a licence under the patent shall not be granted and a share in the patent shall not be assigned by one of such persons except with the consent of the other person or persons”.

The clause, as amended, was adopted.

39. *Clause 51.*—The following amendment was accepted:—

Page 32, line 42, for “co-proprietors”, substitute “persons registered as grantee or proprietor”.

The clause, as amended, was adopted.

40. *Clause 52.*—The clause was adopted without amendment.

41. *Clause 53.*—The following amendments were accepted:—

Page 34,

(i) for lines 1 and 2, substitute—

“is capable of being used as food or as medicine or drug shall be—

(a) ten years from the commencement of this Act, or

(b) sixteen years from the date as of which the patent was sealed under the Indian Patents and Designs Act, 1911, whichever is less”.

(ii) line 12 for “three months”, substitute “six months”.

The clause as amended, was adopted.

42. The Committee then adjourned to meet again on Friday, the 7th October, 1966, at 10.00 hours.

XXVIII

Twenty-Eighth Sitting

The Committee met on Friday, the 7th October, 1966 from 10.00 to 13.00 and again from 15.00 to 17.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh

3. Shri Ramchandra Vithal Bade

4. Shri Pannalal Barupal
5. Shri Bibhuti Mishra
6. Sardar Daljit Singh
7. Shri Basanta Kumar Das
8. Shri V. B. Gandhi
9. Shri H. K. V. Gowdh
10. Shri Kashi Ram Gupta
11. Shri Prabhu Dayal Himatsingka
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri M. R. Masani
14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
16. Shri P. S. Naskar
17. Shri Naval Prabhakar
18. Shri R. Ramanathan Chettiar
19. Shri A. T. Sarma
20. Dr. C. B. Singh
21. Shri K. K. Warior
22. Shri Balkrishna Wasnik

Rajya Sabha

23. Shri Arjun Arora
24. Shri Vimalkumar M. Chordia
25. Shri R. S. Doogar
26. Shri P. K. Kumaran
27. Shri Shyamnandan Mishra
28. Shri Dahyabhai V. Patel
29. Shri M. R. Shervani
30. Dr. M. M. S. Siddhu
31. Shri Dalpat Singh

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*
3. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVES OF THE MINISTRY OF LAW

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Deptt.*
2. Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. The Committee resumed clause-by-clause consideration of the Bill.

3. *Clause 13:*

As decided by the Committee at their sitting held on the 6th October, 1966, a draft amendment to provide for completion of investigation by the examiner of an application for a patent referred to him under section 12 ordinarily within a period of eighteen months, was considered by the Committee. The Committee decided that the following amendment should be incorporated in Clause 12 *instead of* Clause 13:—

Page 11, *after line 5, insert*

- “(2) The examiner to whom the application and the specification relating thereto are referred under sub-section (1) shall ordinarily make the report to the Controller within a period of eighteen months from the date of such reference”.

Clause 12 as amended was adopted accordingly.

4. *Clauses 54 to 56:* The clauses were adopted without amendment.

5. *Clause 57:* The following amendments were accepted:—

Page 36,

- (i) lines 5 and 6, for “the complete specification,” substitute “the application for the patent or the complete specification”.
- (ii) line 9, for “a specification”, substitute “an application for a patent or a specification”.
- (iii) line 14, for “a specification”, substitute “an application for a patent or a specification”.

- (iv) line 17, for "a specification", substitute "an application for a patent or a specification".
- (v) line 32, for "passed", substitute "issued".
- (vi) line 33, for "and", substitute "or".

The clause, as amended, was adopted.

6. *Clause 58*: The clause was adopted without amendment.

7. *Clause 59*: The following amendments were accepted:—

Page 37,

- (i) line 9, for "a complete specification", substitute "an application for a patent or a complete specification".
- (ii) line 12, after "obivious mistake", insert "and no amendment of a complete specification shall be allowed".

The clause, as amended, was adopted.

8. *Clause 60*: The following amendments were accepted:—

(1) Page 37, for lines 32 to 40, substitute.

"60. (1) Where a patent has ceased to have effect reason of failure to pay any renewal fee within the prescribed period or within that period as extended under sub-section (4) of section 53, the patentee or his legal representative, and where the patent was held by two or more persons jointly, then, with the leave of the Controller, one or more of them without joining the others, may, within one year from the date on which the patent ceased to have effect, make an application for the restoration of the patent".

(2) Page 38, for lines 1 to 5, substitute.

"(2) The provisions of sub-section (1) shall also apply to patents granted before the commencement of this Act, subject to the modification that for the reference to the period prescribed or to sub-section (4) of section 53, there shall be substituted a reference to the period prescribed therefor under the Indian Patents and Designs Act, 1911 or to sub-section (2) of section 14 of that Act".

The clause, as amended, was adopted.

9. *Clause 61*: The following amendments were accepted:—

Page 38, for lines 11 to 14, substitute.

"61. (i) If, after hearing the applicant in cases where the applicant so desires or the Controller thinks fit, the Controller is *prima facie* satisfied that the failure to pay the

renewal fee was unintentional and that there has been no undue delay in the making of the application, he shall advertise the application in the”.

(ii) *for line 29, substitute*

“restore the patent and any patent of addition specified in the application which has ceased to have effect on the cesser of that patent”.

The clause, as amended, was adopted.

10. *Clause 62:* The following amendments were accepted:—

- (1) Page 38, line 40, *for* “order restoring the”, *substitute* “advertisement of the application for restoration of the”.
- (2) Page 39, lines 3 and 4, *for* “order restoring the”, *substitute* “advertisement of the application for restoration of the”.

The clause, as amended, was adopted.

11. *Clause 63:* The clause was adopted without amendment.

12. *Clause 64:* The following amendments were accepted:—

- (1) Page 39, line 24, *after* “Government”, *insert*
“or on a counter-claim in a suit for infringement of the patent”

(2) Page 40, (i) *after* line 7, *insert*—

“Provided that in relation to patents granted before the commencement of this Act, this clause shall have effect as if the words ‘or elsewhere’ had been omitted,”.

(ii) *after* line 12, *insert*

“Provided that in relation to patents granted before the commencement of this Act, this clause shall have effect as if the words ‘or elsewhere’ had been omitted,”.

(iii) line 39, *for* “material particulars”, *substitute* “any material particular”.

(3) Page 41, (i) line 2, *after* “made”, *insert* “or caused to be made”.

(ii) line 12, *after* “importation”, *insert*

“except where such importation has been for the purpose of reasonable trial or experiment only”.

The Clause, as amended, was adopted.

13. *Clauses 65 to 67:* The clauses were adopted without amendment.

14. *Clause 68:* The following amendments were accepted:—
Page 43,

(i) lines 7 and 8, for “three months, or within such further period not exceeding three months”, substitute “six months from the execution thereof or within such further period not exceeding six months”.

(ii) line 10, omit “from the execution thereof”.

The clause, as amended, was adopted.

15. *Clause 69:* The following amendment was accepted:—
Page 43, for lines 36-41, substitute

“Provided that if there is any dispute between the parties whether the assignment, mortgage, licence, transmission, operation of law or any other such transaction has validly vested in such person a title to the patent or any share or interest therein, the Controller may refuse to take any action under clause (a) or, as the case may be, under clause (b), until the rights of the parties have been determined by a competent court.

The clause, as amended, was adopted.

16. *Clauses 70 to 73:* The clauses were adopted without amendment.

17. *Clause 74:* The following amendment was accepted:—

Page 45, for lines 25 and 26, substitute

“74(I) For the purposes of this Act, there shall be an office which shall be known as the patent office.

(IA) The patent office provided by the Central Government under the Indian Patents and Designs Act, 1911, shall be the patent office under this Act”.

The clause, as amended, was adopted.

18. *Clauses 75 and 76:* The clauses were adopted without amendment.

19. *Clause 77:* The following amendments were accepted: —

Page 46, (i) line 27, after “application, made” insert “within the prescribed time and”.

- (ii) line 29, after "ex-parte", insert "on application made within the prescribed time and in the prescribed manner".

The clause, as amended, was adopted.

20. *Clause 78 to 81:* The clauses were adopted without amendment.

21. *Clause 82:* The following amendment was accepted:—

Page 48, line 9, for "In this Chapter", substitute "In this Chapter, unless the context otherwise requires".

The clause, as amended, was adopted.

22. *Clause 83:* The clause was adopted without amendment.

23. *Clause 84:* The following amendments were accepted:—

(1) Page 48, (i) line 26, after "satisfied", insert "or that the patented invention is not available to the public at a reasonable price".

(ii) line 32, after "satisfied" insert "or that the patented invention is not available to the public at a reasonable price".

(2) Page 49, (i) line 5, after "satisfied", insert "or that the patented invention is not available to the public at a reasonable price".

(ii) omit lines 9 and 10.

The clause, as amended, was adopted.

24. *Clause 85:* The following amendments were accepted:—

Page 49, (i) omit lines 19 to 22.

(ii) line 23, for "(iv)", substitute "(iii)"

The clause, as amended, was adopted.

25. *Clause 86:* The following amendments were accepted:—

Page 49, (i) line 34, after "satisfied", insert

"or that the patented invention is not available to the public at a reasonable price".

(ii) lines 36-37, after "satisfied", insert

"or that the patented invention is not available to the public at a reasonable price".

The clause, as amended, was adopted.

26. *Clause 87*: The clause was adopted without amendment.

27. *Clause 88*: The following amendment was accepted:—

Page 50, line 33, *after* “upon”, *insert*

“notwithstanding that he is already the holder of a licence under the patent”.

The clause, as amended, was adopted.

28. *Clause 89*: The following amendments were accepted:—

Page 51,

- (i) line 28, *for* “the date of the endorsement”, *substitute* “the date of the order granting the first licence under Section 88”.
- (ii) line 31, *after* “satisfied”, *insert* “or that the patented invention is not available to the public at a reasonable price”.
- (iii) line 39, *after* “satisfied”, *insert* “or that the patented invention is not available to the public at a reasonable price”.
- (iv) *after* line 39, *add*—

“(4) Every application under sub-section (I) shall ordinarily be decided within one year of its being presented to the Controller”.

The clause, as amended, was adopted.

29. *Clause 90*: The clause was adopted without amendment.

30. *Clause 91*: The following amendments were accepted:—

Page 53, (i) *after* line 3, *insert*

“Provided that in any case where the patentee establishes that the reason why a patented invention could not be worked as aforesaid before the date of the application was due to any State or Central Act or any rule or regulation made thereunder or any order of the Government imposed otherwise than by way of a condition for the working of the invention in India or for the disposal of the patented articles or of the articles made by the process or by the use of the patented plant, machinery, or apparatus, then the period of adjournment ordered under this sub-section shall be reckoned from the date on which the period during which the working of the invention was prevented by such Act, rule or regulation or order of Government as computed from the date of the application, expires”.

(ii) *omit* lines 8 to 20.

The clause, as amended, was adopted.

31. *Clause 92*: The clause was adopted without amendment.

32. *Clause 93*: The following amendment was accepted:—

Page 54, line 40, for "Central Government" substitute "High Court".

The clause, as amended, was adopted.

33. *Clause 94*: The clause was adopted without amendment.

34. *Clause 95*: The following amendment was accepted:—

Page 55, line 34, after "other matters to", insert,

"the royalty and other remuneration, if any, payable to the patentee,".

The clause, as amended, was adopted.

35. *Clause 96*: The following amendments were accepted:—

Page 56, (1) for lines 5 to 8, substitute—

"(2) No order under sub-section (1) shall be made unless the Controller is satisfied—

(i) that the applicant is able and willing to grant, or procure the grant to the patentee and his licencees if they so desire, of a licence in respect of the other invention on reasonable terms; and

(ii) that the other invention has made a substantial contribution to the establishment or development of commercial or industrial activities in India."

(2) *omit* lines 18 and 19

The clause, as amended, was adopted.

36. *Clause 97*: The following amendment was accepted:—

Page 56, *omit* lines 38 and 39.

The clause, as amended, was adopted.

37. *Clause 98*: The clause was adopted without amendment.

38. *Clause 99*: The following amendment was accepted:—

Page 57, lines 17 and 18, *omit*

“and under which no royalty or other remuneration is payable to the patentee”.

The clause, as amended, was adopted.

39. *Clause 100*: The following amendments were accepted:—

(1) Page 57, line 30, *after* “use of the invention”, *insert*—

“by the Central Government or any person authorised in writing by it”.

(2) Page 58, (i) lines 16 and 17,

for “after the use has begun” *substitute* “of the fact”.

(ii) lines 19 and 20,

for “the use of the invention has been” *substitute* “the invention has been made, used, exercised or vended.”.

The clause, as amended, was adopted.

40. *Clauses 101 to 103*: The clauses were adopted without amendment.

41. *Clause 104*: The following amendment was accepted:—

“Page 52, *after* line 13, *insert*—

“Provided that where a counter claim for revocation of the patent is made by the defendant, the suit, along with the counter claim shall be transferred to the High Court for decision.”.

The clause, as amended, was adopted.

42. *Clauses 105 and 106*: The clauses were adopted without amendment.

43. *Clause 107*: The following amendments were accepted:—

Page 63,

(i) line 20, *after* “107”, *insert* “(1)”

(ii) *after* line 22, *insert*—

“(2) In a suit for infringement of a patent granted in respect of a method or process of manufacture of a substance referred to in section 5, any substance of the

same chemical composition or constitution as the first mentioned substance shall be presumed, unless the contrary is proved, to have been made by the aforesaid patented method or process."

The clause, as amended, was adopted.

44. *Clauses 108 to 115*: The clauses were adopted without amendment.

45. *Clause 116*: Consideration of the clause was not concluded.

46. Consideration of the proposed new clause 47A which was held over at their sitting held on the 6th October, 1966, was not pressed by the members in view of adoption of Government amendment to clause 107.

The Committee then adjourned to meet again on Saturday, the 8th October, 1966 at 10.00 hours.

XXIX

Twenty-Ninth Sitting

The Committee met on Saturday, the 8th October, 1966 from 10.00 to 11.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Panna Lal Barupal
4. Shri Bibhuti Mishra
5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri H. K. V. Gowdh
8. Shri Prabhu Dayal Himatsingka
9. Shri Madhavrao Laxmanrao Jadhav
10. Shri Braj Behari Mehrotra
11. Shri Bibudhendra Mishra

12. Shri P. S. Naskar
13. Shri Chhotubhai M. Patel
14. Shri Naval Prabhakar
15. Shri R. Ramanathan Chettiar
16. Shri A. T. Sarma
17. Dr. C. B. Singh
18. Dr. L. M. Singhvi
19. Shri K. K. Warior
20. Shri Balkrishna Wasnik

Rajya Sabha

21. Shri Arjun Arora
22. Shri Vimalkumar M. Chordia
23. Shri R. S. Doogar
24. Shri P. K. Kumaran
25. Shri Shyamnandan Mishra
26. Shri Dahyabhai V. Patel
27. Dr. M. M. S. Siddhu.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*
3. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVES OF THE MINISTRY OF LAW

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department.*
2. Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. The Committee resumed clause-by-clause consideration of the Bill.

3. *Clause 116: The following amendment was accepted:—*

Page 66, line 34, for "section 86 and section 89" substitute "section 84, section 86, section 89, section 93, section 96 and section 97".

The clause, as amended, was adopted.

4. *Clause 117: The following amendment was accepted:—*

Page 67, for lines 9 and 10, substitute—

"(3) Every such appeal shall be heard as expeditiously as possible and endeavour shall be made to decide the appeal within a period of twelve months from the date on which it is filed".

The clause, as amended, was adopted.

5. *Clauses 118 to 125: The clauses were adopted without amendment.*

6. *Clause 126: The following amendments were accepted:—*

Page 69, (i) line 21, after "126" insert "(i)".

(ii) for lines 24 to 26, substitute—

"(a) he is a citizen of India;".

(iii) lines 28 and 29, omit "in physical science or engineering".

(iv) line 30, omit "scientific or technical".

(v) omit lines 37 to 40.

Page 70,

(2) (i) omit lines 1 to 6

(ii) after line 7, insert—

"(2) Notwithstanding anything contained in sub-section (1), a person who has been practising as a patent agent before the 1st day of November, 1966 and has filed not less than five complete specifications before the said day, shall, on payment of prescribed fee, be qualified to have his name entered in the register of patent agents".

The clause, as amended, was adopted.

7. *Clauses 127 to 130: The clauses were adopted without amendment.*

8. *Clause 131:* The following amendment was accepted:—

Page 71, lines 33 and 34,

omit “, or who is for the time being suspended from acting as a patent agent”.

The clause, as amended, was adopted.

9. *Clauses 132 to 139:* The clauses were adopted without amendment.

10. *Clause 140:* The following amendment was accepted:—

Page 76, line 32, for “three months”, substitute “one year”.

The clause, as amended, was adopted.

11. *Clauses 141 to 160:* The clauses were adopted without amendment.

12. *Clause 161:* The following amendment was accepted:—

Page 83, for lines 1 to 3, substitute—

“(4) A patent granted in pursuance of any such application as is referred to in sub-section (1) shall be dated as of the date on which the request for reviving such application was made under sub-section (1)”.

The clause, as amended, was adopted.

13. *Clause 162:* The following amendments were accepted:—

Page 83, (i) for lines 7 to 11, substitute—

“(2) Notwithstanding the repeal of the Indian Patents and Designs Act, 1911, in so far as it relates to patents—

(a) the provisions of section 21A of that Act and of any rules made thereunder shall continue to apply in relation to any patent granted before the commencement of this Act in pursuance of that section, and

(b) the renewal fee in respect of a patent granted under that Act shall be as fixed thereunder”.

(ii) after line 18, insert—

“(5) Notwithstanding anything contained in this Act, any suit for infringement of a patent or any proceeding for

revocation of a patent, pending in any court at the commencement of this Act, may be continued and disposed of, as if this Act had not been passed.”.

The clause, as amended, was adopted.

14. *First Schedule*.—The schedule was adopted without amendment subject, however, to consequential changes, if any, to be made by the Legislative Counsel.

15. *Clause 1*: The following amendments were accepted:—

Page 1, (i) line 5, for “1965”, substitute “1966”.

(ii) line 8, for “appoint”, substitute “appoint and different dates may be appointed for different provisions of this Act”.

The clause, as amended, was adopted.

16. *Enacting Formula*.—The following amendment was accepted:—

Page 1, line 1, for “Sixteenth”, substitute “Seventeenth”.

The enacting formula, as amended, was adopted.

17. *Title*.—The title was adopted without amendment.

18. *Clause 2*: The clause as amended on the 5th October, 1966 was adopted subject to consequential changes, if any, to be made by the Legislative Counsel.

19. The Chairman then drew the attention of the Committee to the provisions of Direction 87 of the Directions by the Speaker under the Rules of Procedure regarding minutes of dissent.

20. The Committee directed the Legislative Counsel (Draftsman) to correct the patent errors and to carry out amendments of consequential nature in the Bill and submit an attested copy thereof, as amended and adopted, by Saturday, the 15th October, 1966, at the latest.

21. The Committee also decided that since the evidence given before them was voluminous and ran into about a thousand pages, it should be printed in two volumes instead of one, so that it might be more easy to handle. (The Committee at their earlier sitting held on the 15th July, 1966 had decided to print and lay the evidence on the Tables of both the Houses.)

22. The Committee also decided, on a suggestion being made, that before the Evidence Volumes were finally printed, Members should be given an opportunity to peruse their respective portions in the pro-

ceedings so that they could carry out any verbal changes therein, if necessary, as it was likely that some of them had not done so before when the verbatim record was sent to them. It was agreed that two copies of the proof should be made available to the Members for perusal by the Secretary of the Committee in his room for a period of one week.

23. The Committee also reaffirmed their earlier decision that copies of the memoranda|representations etc. received by the Committee from the various parties|organisations|institutions|experts—both foreign and Indian—should be placed in the Parliament Library for reference.

24. The Committee also decided that the Study Notes on the visits undertaken by their Study Groups to the various pharmaceutical Units, Research Institutes etc. for an on-the-spot study of their working etc. should not be printed, but only laid on the Tables of both the Houses. An adequate number of copies should, however, be kept in the Parliament Library for reference.

25. The Chairman also informed the members that since the Report of the Committee was to be presented to the House on the first day of the next session, viz., the 1st November, 1966, members who were desirous of giving their Minutes of Dissent should do so by 10 A.M. on the 1st November, 1966. Further they should send 4 copies of their Minutes of Dissent so that these could be readily tacked to the authenticated copies of the Report to be presented to Lok Sabha and placed in the Parliament Library.

26. The Committee then adjourned to meet again on Monday, the 31st October, 1966, at 10.00 hours to consider their draft report.

XXX

THIRTIETH SITTING

The Committee met on Monday, the 31st October, 1966 from 15.00 to 16.05 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Dinen Bhattacharya
6. Shri Bibhuti Mishra
7. Shri P. C. Borooah
8. Sardar Daljit Singh
9. Shri Basanta Kumar Das
10. Shri V. B. Gandhi
11. Shri H. K. V. Gowdh
12. Shri Kashi Ram Gupta
13. Shri Prabhu Dayal Himatsingka
14. Shri Madhavrao Laxmanrao Jadhav
15. Shri Mathew Maniyangadan
16. Shri Braj Behari Mehrotra
17. Shrimati Sharda Mukerjee
18. Shri Chhotubhai M. Patel
19. Shri Naval Prabhakar
20. Shri Sham Lal Saraf
21. Shri A. T. Sarma
22. Dr. C. B. Singh
23. Shri K. K. Warior
24. Shri Balkrishna Wasnik

Rajya Sabha

25. Shri Babubhai M. Chinai
26. Shri Vimalkumar M. Chordia
27. Shri R. S. Doogar
28. Shri B. T. Kulkarni
29. Shri P. K. Kumaran
30. Shri Shyamnandan Mishra
31. Shri Dahyabhai V. Patel
32. Shri Mulka Govinda Reddy
33. Dr. M. M. S. Siddhu
34. Shri Dalpat Singh

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*
3. Shri R. V. Pai, *Joint Controller of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVE OF THE MINISTRY OF LAW

Shri V. N. Bhatia, *Joint Secretary, Legislative Department.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

2. The Committee adopted the Bill as amended.
3. The Committee adopted the Draft Report.
4. The member were asked to give their minute of dissent, if any, by 10.00 hours on Tuesday, the 1st November, 1966. Four copies of the minutes were to be sent.
5. The Committee authorised the Chairman and, in his absence, Dr. C. B. Singh to present the Report and to lay the Evidence, and Study Notes on the Table of the Lok Sabha on the 1st November, 1966.

6. The Committee also authorised Shri R. S. Doogar and in his absence, Shri Dahyabhai V. Patel to lay the Report, Evidence and Study Notes on the Table of Rajya Sabha at its first sitting.

7. The Committee placed on record their appreciation of the assistance rendered to them in their task by the Secretariat.

8. The Chairman apprized the Committee of the contents of the letter he had received from Dr. J. R. Guha, General Manager, Martin and Haris (Pvt.), Ltd., Calcutta wherein he had sought his permission to publish the comments recorded by him in their Visitor's Book when they visited their Factory on the 15th June, 1966. The Committee decided that it should not be published and the firm should be informed accordingly.

9. The Committee then adjourned.

**PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND CONDUCT OF
BUSINESS IN LOK SABHA (FIFTH EDITION) AND PRINTED BY THE GENERAL
MANAGER, GOVERNMENT OF INDIA PRESS, MINTO ROAD, NEW DELHI.**

LOK SABHA
JOINT COMMITTEE
ON
THE PATENTS BILL, 1965

EVIDENCE

(Volume 1)



LOK SABHA SECRETARIAT
NEW DELHI

October, 1966/Kartika 1888 (Saka)

Price : Rs. 5:10

JOINT COMMITTEE ON THE PATENTS BILL, 1965

COMPOSITION OF THE COMMITTEE

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
9. Sardar Daljit Singh
10. Shri Basanta Kumar Das
11. Shri V. B. Gandhi
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16. Shri Mathew Maniyangadan
17. Shri M. R. Masani
18. Shri Braj Behari Mehrotra
19. Shri Bibudhendra Misra
20. Shrimati Sharda Mukerjee
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22. Shri Chhotubhai M. Patel
23. Shri Naval Prabhakar
24. Shri R. Ramanathan Chettia.
25. Shri Sham Lal Saraf
26. Shri A. T. Sarma
27. Dr. C. B. Singh
28. Dr. L. M. Singhvi
29. Shri P. Venkatasubbaiah
30. Shri K. K. Warior
31. Shri Balkrishna Wasnik
32. Shri Ram Sewak Yadav

Rajya Sabha

- *33. Shri Arjun Arora
- *34. Shri T. Chengalvaroyan
35. Shri Babubhai M. Chinai
36. Shri Vimalkumar M. Chordia
- *37. Shri R. S. Doogar
38. Shri D. P. Karmarkar

*Ceased to be members of the Committee w.e.f. 2nd April, 1966 on their retirement from Rajya Sabha and were reappointed by Rajya Sabha on the 7th April, 1966 except Shri Dalpat Singh who was reappointed on the 13th May, 1966.

(ii).

39. Shri B. T. Kulkarni
40. Shri P. K. Kumaran
- *41. Shri Shyamnañdan Mishra
42. Shri Dahyabhai V. Patel
43. Shri Mulka Govinda Reddy
- †44. Shri D. Sanjivayya
- *45. Shri M. R. Shervani
46. Dr. M.M.S. Siddhu
- *47. Shri Dalpat Singh
- *48. Shri R. P. Sinha

DRAFTSMEN.

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

REPRESENTATIVES OF THE MINISTRY.

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*
4. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

*Ceased to be members of the Committee w.e.f. 2nd April, 1966 on their retirement from Rajya Sabha and were reappointed by Rajya Sabha on the 7th April, 1966 except Shri Dalpat Singh who was reappointed on the 13th May, 1966.

†Appointed on the 17th May, 1966 vice Shri T. N. Singh resigned.

WITNESSES EXAMINED

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	2. Dr. Ulrich Heubaum		
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	2. Mr. J. Egli, Director of the Swiss Society of Chemical Indus- tries.		
	3. Mr. Haslam, Head of the Patent Department Wellcome Foun- dation Ltd., London.		
	4. Mr. D. H. Nowothy, Delegate of Swiss Society of Chemical Industries, Zurich.		
13	Prof. Gino Bergami, Director, Institute Di Fisiologia Uma- Na Universita (Naples) and Dr. Giorgio Delgiudice, Leodoga SPA Lepetit, Via Andrea Vesalio 6, Rome. (Assisted by Mr. Gabriel Brohamasha as Interpreter).	5-7-1966	378
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JOINT COMMITTEE ON THE PATENTS BILL, 1965

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965**

Thursday, the 27th January, 1966 at 14.00 hours

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
7. Shri Bibhuti Mishra
8. Shri P. C. Borooah
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13. Shri Kashi Ram Gupta
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31. Shri Ram Sewak Yadav

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3. Shri B. N. Attrishi, *O.S.D., Department of Industry, Ministry of Industry & Supply.*
4. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

L. S. Davar & Co., *Patent & Trade Mark Attorneys, Calcutta.*
Shri L. S. Davar

L. S. Davar & Co., Patent & Trade Mark Attorneys, Calcutta.

Spokesman:

Shri L. S. Davar

(The Witness was called in and he took his seat).

Mr. Chairman: We have received your memorandum which has been distributed to all the Members. Do you want to add anything to it? You may add now, and then Members will ask you questions. I presume you represent the Patent and Trade Mark Attorneys, Calcutta.

Shri L. S. Davar: Yes, Sir. May it please Your Honour, if I may be permitted, I would like to give to the hon. Members a general idea of the development of the patent system in this world. That will be the basis upon which the patent system has been formed not only in other countries but also in India. Then, I will deal with the philosophy of the

patent system and then I will deal with the points which have been raised in the memorandum which I have already submitted to the Committee, and then the implications of the submissions which I have made on the proposed Bill.

Regarding the development of the patent system, in the middle of the 16th century, when England was in a low stage of industrial development in relation to its neighbouring countries, it had the desire to industrialise itself. To fulfil that desire, England imported the craftsmen as well as the inventions from other countries. As an inducement to the importation of the knowledge and the know-how of the inventions, they gave what they called a certain amount of privilege which resulted in patents. That formed ultimately the basis of the patent system in England. The same thing happened about 200 years afterwards in the United States. When the United States got its independence in 1774,

the know-how and the inventions as well as the machinery were all in the hands of the British people, and they controlled the import of the know-how and the inventions as well as the machines to America. The United States was faced with a predicament as to how to industrialise itself. At that time, George Washington, in his inaugural address "urged the expediency to give effectual encouragement as well to the introduction of new and useful inventions from abroad as to the exercise of skill and genius at home." as a result of the policy of the first President of the United States, the patent system was introduced in the United States in 1790.

Coming to the patterns of the other Governments, firstly; the USSR, historically, the USSR introduced the patent system in 1812 and a planned and co-ordinated development of science and technology has therefore made Russia a great industrial and technical power. The introduction of a system of encouraging inventions played a large role in the economic and industrial development of that country. The patent system in Russia is based on public recognition of the personal interest of the inventor. When the new regime came to power, a new law relating to the patents was introduced and although it is the general belief among the public that there is no patent system in Russia, I would like the hon. Members to know that in 1964, 91,000 patents were filed in Russia as against about 65,000 in America and about 45,000 in England, and a similar number in countries like Germany and Japan. Of course, in Russia, there are two systems of patents: one is the system which we understand in the non-communist countries or what we understand in this country, and the other is the author's certificate, namely, the Government has got the right to use the invention, but when the Government uses the invention, it pays a certain amount of royalty or remuneration to the inventor, depending upon the profit

which the organisation of the Government realises in that particular field, although the maximum profit which an inventor can get from his invention is limited to 22,000 dollars. The other system which Russia has got is the normal patent system. For example, any person in India can apply for a patent and if Russia respects the rights of the patent in the sense that if anybody else from another country or even in his own country wants to infringe the rights of a foreigner in Russia who is the patent-holder, then the Government will protect that right and prevent the importation of machinery or any article made according to the process into Russia and if at all it is necessary to import, they will ask the importer to pay a certain amount of royalty to the patent-holder. That is the position in Russia.

I have given to the hon. Members, the basis of the patent system both in the communist countries and the non-communist countries. I would now like to explain to the hon. Members what is the philosophy of the patent system.

Shri Shervani: He might give us the history of development of the patent laws in Japan also, before he proceeds to the next point.

Shri L. S. Davar: In view of the fact that one of the hon. Members has raised the point as to the history of patent law in Japan, I might say that the patent law in Japan is based on the system as obtains in any other country.

Shri Arjun Arora: When did that come into being in Japan?

Shri L. S. Davar: With your permission, Mr. Chairman, I might answer this question straightway.

Mr. Chairman: The questions will follow afterwards; otherwise, there will be no end.

Shri L. S. Davar: I might as well deal with one point here with regard

to Japan. Although it has been considered, and many people have the impression, that Japan is the biggest imitator, I may point out that that conception might have been right perhaps 20 years ago or in the pre-war period, but since the war period, Japan has improved its technology by importing the know-how from other countries and obtaining licences from other countries and at present, Japan is the leading country in the world in respect of the number of patents which are being granted there. The law is the same as in any other country, whether it be the United States of America, the United Kingdom or, for that matter, India; only certain details or provisions may slightly differ, but the principal basis upon which patent law is framed in Japan is the same as in any other country.

What is the philosophy of the patent system? We must appreciate that the inventor, the man who creates anything new, has the inherent right to keep what he invents secret and work it himself. It depends upon what profit he makes—that is immaterial—but he has the inherent right, the natural right to keep it secret to himself. Now, if he discloses to the public or discloses to the Government on behalf of the public, the Government says, since he has faithfully and honestly disclosed what he had the inherent right to keep a secret they will give him a reward. That reward is not in the form of a monopoly but a reward for the scientific achievement or improvement which the man concerned has made and which he discloses to the Government.

What is the effect of that on the economy or what is the social effect of that in the country? When a new invention comes out in the country it gives a cue to the other people to know that here is a field in which they can also develop or find out alternative products or alternative processes. Secondly, supposing a man comes to me and says: "I have got a wonderful idea; are you pre-

pared to invest Rs. 5 lakhs?" Then I will ask him: "What is that wonderful idea?" Naturally, he will say: "First promise me that you are going to put in the money, otherwise I am not going to disclose". But, if he has a patent he can openly go to any prospective investor and say that he has such and such an idea, he has the patent which covers that idea, he has the protection and then ask him whether he is prepared to invest the money in it or not. Therefore, it can induce the prospective investor to invest money in developing that particular invention. That is another advantage, that development of industry can take place by virtue of the patent system.

Now, the other philosophy is that once an idea becomes common to the public after 17 years or 15 years of protection—whatever the term is—when the term of patent expires everyone is entitled to use it. That is another advantage to the public, namely, that the disclosure of the invention results in the prospect of people investing money in that industry and making the invention free to the public after the term of patent expires and thus giving inspiration to others to make inventions in the same field.

This is the philosophy of the patent system and the whole philosophy, therefore, turns round on this point, namely, that the industrial development in the country should take place. That is the whole idea behind it. Therefore, the object of our patent law should be that industry in our country should develop.

Now, in many countries, not only in India, there is a general feeling that this sort of monopoly is being abused. How is that being abused? It is abused in this way that a foreigner has got patent in this country, he does not work that invention, he has the monopoly in that particular product or particular process, he is the only person who can export from his country into our country, his

industry is developing while we are merely importers of that machinery. That is what they call the abuse of the patent system.

Therefore, in 1961, in the General Assembly of the United Nations this question was raised by Bolivia and the General Assembly of the United Nations requested the Secretary General to go into the question as to how the patent system is being abused by developed countries in developing countries and, also, what role do patents play in the industrial development of developing countries. In 1964, the Secretary General, after making enquiries from 55 different countries, prepared a report. I will give to the hon. Members just a gist of the report—this is the publication by the United Nations on the role of patents in the transfer of technology to developing countries—which was published.

Several hon. Members: We have not got that report. It is not available in the library also.

Mr. Chairman: I have also not received it. The Ministry will try to supply more copies.

Shri L. S. Davar: I have, for the convenience of hon. Members, prepared a gist of the report published in a public document published by the United Nations and which is available from the United Nations at a cost of \$1.5. The resolution is this:

"That on the 19th December, 1961, the General Assembly of the United Nations in its resolution 1713 stated"

Mr. Chairman: You need not read that. The resolution has been circulated to hon. Members.

Shri L. S. Davar: I will now give hon. Members a gist of the replies

from the various countries. Australia said:

"The patent system has fulfilled its function of industrial progress."

France said:

"60 per cent of patents are from foreigners.

The country pays 300 million new Francs, that is, equal to 300 million rupees, in payment of know-how and the transfer of technology is facilitated by the Patent System which gives assurance of protection to the owners of know-how.

Israel: The utilisation of foreign inventions by domestic enterprises will be rendered impossible in the absence of Patent protection.

Italy: The country is primarily a recipient of foreign inventions access to which is helped by Patent System.

Japan: Introduction of new foreign technology has contributed greatly to the development of industries and the right of Patents of foreigners is protected."

I may pause here and submit to the hon. Members that during the period of 1958 to 1962, Japan paid, in 1958, 40 million dollars in the form of royalty of patents and 2 million dollars for the know-how; in 1959, paid 51 million dollars in royalty and 4 million dollars on the know-how; in 1960, it paid 80 million dollars in royalty and 7 million dollars for the know-how; in 1961, Japan paid 99 million dollars in royalty and 11 million dollars on the know-how and in 1962, it paid 103 million dollars in royalty and 10 million dollars on the know-how. These amounts were paid as royalty for patents and the know-how respectively notwithstanding the fact that payment of foreign exchange is controlled in the same manner in Japan as it is in India.

Dr. M. M. S. Siddhu: You should have also read the Indian Govern-

ment's opinion on it. You are only giving the views of other countries.

Shri Sham Lal Saraf: The Government of India has said that the present patent law is functioning well.

Shri L. S. Davar: I submit the view of the Government of India should be known to hon. Members. I am giving the views of other countries. These are the views expressed by various countries which I have taken as extracts from the United Nations' publication for the convenience of the hon. Members here. I quote further the views of other countries:

"Mexico: Equality before the law of national and foreign inventors facilitates availability of foreign know-how."

Holland: Due to Patent System, foreign patentees are prepared to give licences and know-how for new inventions.

New Zealand: The Government has come to realise that it should not expect to be a recipient of inventive skill from abroad without payment of royalties towards cost of research and rewarding inventors.

Switzerland: To encourage the supply of inventions and know-how to developing countries, measures are taken to see that effective protection is given to patents."

In the United Kingdom, more than half the patents applications come from abroad. From early days, the British law recognises the advantages to the economy in exploiting of the new inventions in the country.

Shri R. Ramanathan Chettiar: In Switzerland, there is no patent law, I suppose.

Shri L. S. Davar: They have a patent law. We have obtained patents in Switzerland on behalf of Indian parties.

Then, this is what did Czechoslovakia say:

"There is an increase in the number of foreign patents applications in our country. Majority of agreements are based on undisclosed know-how and experience."

Hungary: The use of inventions and know-how has been secured on the basis of agreements with foreign patent-holders."

Now, the Secretary-General's Report further included the following conclusions:

"There is an extensive range of national legislation directed against practices that are considered abusive of the national patent system, such as, non-use of patents, restrictive practices and excessive royalties."

Provision for compulsory licensing exists in many countries. Here, I might tell the hon. Members that in order to overcome the abuses of the patents system, many countries, practically all countries, excepting United States and Russia, have a system of compulsory licensing, that is, if the invention is not being worked in the country and if anyone from within the country is anxious to work the invention, then he makes an application to the Controller and after due consideration, if the party is found to be suitable, the Controller can grant a licence.

Now, the experience of many countries has been that this compulsory licensing system has not been found to be very practicable. For example, I would give the figures for five years in different countries. In United Kingdom, only 7 applications were filed in five years; in Canada, only 5 applications were filed; in Denmark—7 applications; in Philippines—8 applications; in Ireland—1 application; in India—4 applications; Israel—3 applications; Japan—nil; New Zealand—nil; Switzerland—nil; Holland—nil; Germany—nil. In Norway, in 27 years, 3 applications were filed, but all those applications were not from nationals of the country but from foreigners asking for licences to work within the country.

There is a very pertinent question as to why, in spite of the fact that licensing system is there and it has failed, this system is still on the statute book. It has been well recognised throughout the world—that has also been confirmed in the Report of the United Nations after consulting several countries—that what is more important is the know-how. It is not patent alone that matters. Patent merely acts as a vehicle. I will show you what a patent document is. (A copy of the patent document was then circulated by Shri L. S. Davar for the perusal of the hon. members.) The patent document merely gives a general idea of the invention. Let me put it this way. If somebody gives me a sketch of this instrument (the microphone) and asks me to manufacture this, I will have to find out as to what metal I should use, what should be height of this and what should be the weight. Thus, in the manufacture of every article, whatever it may be, there is a technical know-how involved and, therefore, patents by themselves are useless without the technical know-how except in some cases where the patent is of a very minor nature. For example, I remember, in 1934, there was a patent for a clamp. The clamp was of a simple nature made of hoop iron, one end turned this way and the other like this (the witness explained this by demonstration with a piece of paper). It was fixed at the end of a railway sleeper in order to prevent vertical cracks. Millions of these were ordered from England. One of the Indian parties realised in 1934, when we had the provision that a patent could be revoked if it was not worked in the country, "why can't I manufacture this." So we approached that party, "if you do not give the licence to us, we are going to make an application for compulsory licensing or revocation of your patent". This used to come from England. In those days when steel was very cheap it was imported at 4 annas and they would supply to the Railways at 8 annas, while the Indian party could

manufacture at a cost of 2 pice. The man, in view of the provisions in the Act, readily agreed. The result was that importation of this thing from England was completely stopped and all the clamps since 1934 even today are being manufactured in this country. Those are exceptional cases. But when we come to the complex type of inventions with which we are now faced, for instance, in the petro-chemical field or in the machinery of a complicated nature, there we essentially want the know-how. From whom do we want the know-how? We want it from the man who has developed the know-how, who has worked it from the very beginning. Therefore, patent merely acts as a vehicle. It is a legal document, one which can establish a relationship between the man who has the know-how and the man who wants to establish the manufacture of that particular article according to the patent. This view has been established not only in this country but in every country of the world. How has Japan industrially advanced in the post-war period? It is because they have obtained the know-how and now you will see that, in countries like Germany or America which are highly industrialised, Japanese goods are being openly offered. These provisions of compulsory licensing or revocation are there, but where the technology is of a very advanced nature, there the know-how is very important.

I might give to the hon. Members another picture of this. What happened during the Second World War? In 1940 when England was invaded by Germany and many of the neighbouring countries had fallen, there was a great need for England to have aircraft as well as to make the radar and other weapons for defence. England could not do it firstly because of the restricted capacity of manufacture it had and secondly because it was always in the danger of being bombarded. What did England do? It went to America. The Tizard Com-

mission was appointed. He went to America and asked the Americans, "will you manufacture these things for us? Here are the patents; you manufacture the Rolls Royce engines according to these patents, radar according to these patents and other weapons for war according to these patents". The Americans said, "we cannot do it without the know-how". What happened on the other side? The English people who had the know-how refused to give the know-how. They said, "what will happen after the war? When the war is over, America will come in competition with us. We do not want to give the know-how notwithstanding the fact that the war is on." The patent is not so important as the know-how in the modern complex type of science. However, the Government prevailed upon them to give the know-how. The Rolls Royce people, for example, took an assurance from the Government that all engines manufactured under the know-how of the English people would be given back to England and not sold in the open market nor used in the open market. In addition to that, when America started manufacturing war weapons as well as the Rolls Royce engines, naturally they also had to develop a certain new technique during the course of manufacture. Then there was an agreement between the Government of the United States and the Government of the United Kingdom, which is known as the P.I.A., i.e., the Patents Interchange Agreement, i.e., the Patents of one country will be given to another country and free use will be made by either of them. The same arrangement now exists between the countries which have a Mutual Defence Pact. In the Mutual Pact, one of the clauses is that an invention which has been made by a member country can be freely used by another country which is a member of the Mutual Defence Pact and that is, of course, England and many of the European countries.

This is how the patents have been playing an important role in the transfer of technology or in the deve-

lopment of science, not only during peace but also during the period when the war is on. The efforts of the United Nations are still continuing to find out ways and means as to how the laws of developing countries should be formulated in order that transfer of technology takes place effectively from the developed to the developing countries. I am only dealing with transfer of technology from the developed to the developing countries because, in so far as the development of technology in our own country is concerned, of course, that is the business of our Government or the business of our industrialists.

BIRPI is an inter-governmental organisation in Geneva which looks after the patent system of various countries and it is organizing, in the second week of February an Asian Seminar in Colombo in order to consider again what should be the laws of the developing countries in relation to patents. I had the privilege of being invited to Washington to become a co-Chairman on world peace through law conference on the Industrial Property Committee and I was specially asked to deal with the subject of transfer of technology from the developed to the developing countries and the role of patents in that technology. The U.S. State Department particularly mentioned that India is not to be considered as an under-developed country and, therefore, my subject had to be as to how, after we have received the technology from other countries, we have developed our own technology and how can we transfer our technology to under-developed countries. Therefore, it is not that we are only going to be the recipient of technology from other countries, but we have to give technology to other countries which are much less developed than we are. There is going to be an international conference in Tokyo in April to consider the law which should be applicable to developing countries particularly in relation to the transfer of technology. This is what has happened throughout the world and what is the intention of the developed coun-

tries, how they want our laws to be framed so that transfer of technology is encouraged to the developing countries. Let us not think that we can get technology from any country. I have been told in many countries: Look, probably you can get technology from East European countries or from Russia for which you don't have to pay. I would like to give the position obtaining in the Soviet Union. During the Hanover Fair in 1965 Soviet Union offered 700 patents and technical processes for use by western countries (*Interruption*). Authorship as well as patents are there. Rights only vest with the government. For patents the right vests with the inventor and nobody else. Now, the Russian Government is setting up an office in West Germany in order to licence the patents which they have taken out in other countries. Offices are being opened in France, Italy and U.K. During the international conference held in Geneva in March 1965 Russian delegation manifested their interest in cooperation with western patent offices in order to remove misinterpretation about the practical procedures and to contribute to a better mutual understanding between the western countries and Russia.

The number of patents from Russia as well as from East European countries is steadily increasing in this country. They are anxious to give out licenses to Indian manufacturers on payment of royalty or lumpsum. The object of giving of this information to hon. Members is this, namely, to show what are the activities of the world wide organisation and not only the activity of the UN but also what other countries are also doing in this field because they have realised that prosperity in their own country cannot be maintained unless they share that prosperity with the countries which have the desire to develop themselves. I will just take a few more minutes.

Shri R. Ramanathan Chettiar: About West Germany please tell us something. What is the position of patents in West Germany?

Shri L. S. Davar: It is the same as in any other country.

Shri R. Ramanathan Chettiar: How patent law is operating there?

Shri L. S. Davar: The most severe patent law they have for examination procedure is in Japan, USA and West Germany. The only difference in the law in West Germany is that their scope of claims is given a much wider interpretation than in other countries. Each country is having its own system.

Shri R. Ramanathan Chettiar: It is more broadbased.

Shri L. S. Davar: They go into the spirit of the invention. In France there are no claims of a patent. Again when the suit is filed they come to know what an invention is. Each country has got its own system.

Shri K. K. Warrior: Please tell us something about your experience with the Indian patents. Of course, you will take some time before you come to that.

Shri L. S. Davar: I will take up Indian patents. I have been connected in this field for over 35 years. It is my interest to see that industrial development takes place in the country. Before the independence, before our government started the plan periods, the number of Indian inventions used to be very small. The quality was so poor that it is a shameful thing to look at those inventions. The invention may relate to a *hooka* or a *chuhla* or some such article, no invention of any high merit was made by the Indian inventor. I am talking in general terms. No great invention was coming out of the country before Independence except in case of some companies like Tatas or Associated Cement Companies who have their own research departments.

How the patent system induces people to make inventions? Let me give one illustration. In 1933 a British company, Dorman Long applied for

patents for the manufacture of steel which had to be used in Howrah bridge. That composition was covered by a patent to Rendell Paimer who were consulting engineers to Government of India at that time. They said the steel required will be high tensile steel and this is the only steel to be used. We were faced with a problem like this. We said: Look here, we have a big work like the Tata Iron and Steel company and if these people are going to get a patent then we will not be able to supply an ounce of steel for the manufacture of the Howrah bridge which was at that time going to be the longest bridge in India. We opposed that patent—not only opposed that patent, but also Tatas started developing their own high-tensile steel. Before we were successful in throwing out that patent, we had developed our own high tensile steel which had better properties—at least as good properties as the steel developed by the British company. If Dorman Long had not come into the picture, Tatas would have gone on with the old type of steel and would not have thought about that. Since then they have been developing various processes in order to manufacture better quality of steel in a cheaper way.

After the war, things have improved in this country. Who can make inventions? It can be either by an individual or by collective efforts. The days of an individual as an inventor are gone. Technology has advanced to such an extent that individuals cannot be regarded as those who can give us good inventions. Individuals can be divided into two different categories. One is the ordinary individual and the other is an individual engaged, for example, in an industry, or in the Government. I am glad to inform the hon. Members that our Government officials for whom I have the highest regard have made some remarkable inventions which are being considered as good inventions throughout the world. I had the privilege of handling the well-known

case of Mr. Suri and several other Railway officials because we help Government in these matters. Their inventions are considered to be of real practical value. You cannot say that patent system has not been responsible for stimulating inventions. As soon as we get opportunities and as soon as we know that Indian inventions can be used within the country, inventions are coming up. Our boys are very bright and clever. Slowly and slowly as the industries develop, things will come up. It is not the fault of the patent system. It was the fault of the Government. When I first went to Calcutta in 1930, letters came from all the people saying: Get us a good agency. Now there are no more agency systems. Everybody is interested in manufacturing. If industries develop, if there are more free enterprises, if there are less restrictions by the Government, if regulation Acts are removed, if more foreign exchange is available, if more raw materials become available and if more industries develop, there will be more competitions and more patents and more genius will develop. This is automatic.

Dr. M. S. Siddhu: Wait for the Dooms Day!

Shri L. S. Davar: Let us not.

The other is invention by collective efforts. The example is CSIR. The number of patents from the CSIR has increased considerably. They are being exploited. How can we say that the patent system has not performed its function? It is a complete misnomer. It is because our country is not industrially developed. As the development takes place, things will become better. Therefore, the object of the patent system should be to see that not only are the inventors encouraged, but also the industry is encouraged to take up inventions and risk their capital in those inventions rather than strangling them. I have made some cryptic remark in my memorandum. I could not help saying that if a man is foolish enough to go to the patent office, the patent office

puts a string round his neck to strangle him. If he escapes, he is shot in the back. That is the exact feeling I have after reading this Bill. I am an Indian. I am sorry to say that the clauses which have been provided are most impractical, most unworkable even in the working of the patent office. The first duty of the Government should have been to see that the patent office works properly. What do the provisions say? They say that a patent will not be granted for seven years and eight years. The patent office can sit on it as long as it likes.

Shri D. P. Karmarkar: Can you cite a single case where the patent officer has taken seven or eight years to give the patent?

Shri L. S. Davar: The present Act provides that a patent must issue within a period of two years or within an extended period of 31 months. The present proposals do not make any provision as to the duration within which patent should be granted....

Shri D. P. Karmarkar: Can you give any instance where it has taken seven or eight years?

Shri L. S. Davar: The present Act provides that the patent must issue within a certain period. Does the Bill say that?

Shri D. P. Karmarkar: I see, it is a prophecy about the Bill.

Shri L. S. Davar: I will say something about the examination system. The examination system provides that search for novelty should be made on a world-wide basis. If that provision is implemented, what will happen? Although we have now got a staff...

Mr. Chairman: You have referred to staff in your memorandum and said that it should be increased ten times.

Shri L. S. Davar: That is a moderate estimate. It may be much more.

Mr. Chairman: You need not refer to that.

Shri L. S. Davar: I think I have finished what I have to say.

Dr. C. B. Singh: On the first page of your memorandum you have stated:

"Further stimulation of inventions will obviously demand incentive which can only be achieved by strong patent protection and...."

What do you mean by this expression 'strong patent protection'?

Shri L. S. Davar: I would define it in this way: Firstly, when you give protection to a person, do not give him the protection that the Government have the right to take away the right which has already been given to him.

Dr. C. B. Singh: How can that be? That cannot happen.

Shri L. S. Davar: That is what the Bill says.

Mr. Chairman: That is only under certain conditions which they have laid down.

Shri L. S. Davar: Under clause 48 Government have the right to use it at any time it likes.

Mr. Chairman: Yes, for public purposes.

Shri L. S. Davar: If it is for security purpose, yes, I am for it, but not for use by the Government.

Mr. Chairman: You want Government to pay compensation?

Shri L. S. Davar: Yes; otherwise, what will happen?

Mr. Chairman: Every Government has that right.

Shri L. S. Davar: Yes. But then pay compensation to the inventor.

Mr. Chairman: That we can understand.

Dr. C. B. Singh: The second point is about recognition of the inherent right of the inventors. According to you, how long this inherent right is to go on or will there be a fixed period?

Shri L. S. Davar: The period in various countries varies from 15 to 17 years or even 20 years. For example, in Australia, it is 16 years; in Austria it is 18 years; in Belgium it is 20 years. It takes about 2, 3 years before you get a patent. Then, you go to the man who looks into the possibility of exploiting it. He takes time in developing it; he is not going to work it out straightway. He takes time in marketing it. What is the inventor going to get all this time? Take, for example, the chemical field. The well-known medicine Thialamidine took 7 years before it came into the market.

Dr. M. M. S. Siddhu: Do you know that many more drugs like Chlorotetracycline came into the market within one year?

Shri L. S. Davar: I am giving one example.

Dr. M. M. S. Siddhu: That is an exception.

Shri L. S. Davar: There are mechanical, electrical, electronic and hundred other types of inventions. In order to give a practical shape to a specification, it will take two, three years. Then the prototype which is made has to be tried and then put to commercial use and then exploitation. It will take 5, 7 years for the invention to come in the market.

Dr. C. B. Singh: The main complaint about the life saving drugs is, after being given the patent, it becomes very costly; it is not within the reach of common man. What steps are to be taken to bring the price down?

Shri L. S. Davar: That again, in my humble submission, is a misnomer. During the last three years no drug patent has been granted. Has the price of any drugs come down?

Dr. C. B. Singh: The prices of some have come down.

Shri L. S. Davar: On the other hand I will agree with you on this point.

Another Conference in the month of October was held in Washington, which I attended. Then, I raised this very question which the honourable Member has raised now, when the Vice-President of an established firm was giving evidence. I said, 'my Government has raised this question; what answer can you give to that?' He evaded the answer before 1500 people present and he could not give a satisfactory answer. I said, 'if you can sell this product for Rs. 5,000 a kilo, have you gone and proved to the people who make the complaint that it costs you Rs. 4,000 a kilo and that your demand is not much. He replied, 'I am not here to answer your questions as to what is my cost price. This complaint is not only restricted to India; this is there all the world over. I have studied this problem. The people spend millions of rupees on research work on certain products which later prove a complete failure. They must recover their loss in some other items where they succeed. The price of sugar is high; the price of wheat is very high; the price of all other consumer goods is high. Why pick up only the poor medicine?

Dr. C. B. Singh: This is a very old argument that they spend so much money on research and sometimes they fail and they want to make up this loss elsewhere. I would like you to give some way out by which this can be minimised. Something has got to be done in this direction.

Shri L. S. Davar: Of course I will be giving you the commercial point. At the last meeting of the International Chamber of Commerce which took place here, the suggestion which I had given to the pharmaceutical manufacturers was this. I told them, 'out of every product that you sell for Rs. 100, 20 per cent or 25 per cent goes to the retailer and the wholesaler; 20 per cent goes on advertisement; out of 50 per cent perhaps 10 per cent or 20 per cent is your cost and the rest is your profit. I asked them, 'why don't you give all your products, whether covered by patents or not covered by

patents, to the Government for its hospitals under the generic names?

This is what happened in America. One store suddenly said that they will reduce the price of drugs to 25 per cent. He sold all the drugs under the generic name and not under the trade mark of a particular manufacturer; the prices came down. I told the drug manufacturers here also to adopt this policy. Don't give the profit to the retailer or to the wholesaler nor you spend any money on advertisement. I don't know whether they would do that.

Shri Dinen Bhattacharya: The Government is not the purchaser always.

Dr. C. B. Singh: Mr. Chairman, I would like you to consider whether this question of selling under generic names can somehow be brought in the Bill itself, so that the prices can be brought down.

Shri Sham Lal Saraf: Mr. Chairman. I would request you to call one member that side and another member from this side so that all of us get a chance to put our questions.

Shri Himmatsinhji: You suggest that the period of licence should be such that the cost can be recovered. Under Clause 53, in one case it is 14 years and in another 10 years. Do you think that is less?

Shri L. S. Davar: Very much less.

Shri Himmatsinhji: In almost all the countries generally the period allowed is 12 to 14 years.

Shri L. S. Davar: I have got a list before me. If the honourable Member wants to see it, I will pass it on.

Shri Bibhuti Mishra: The witness has made a long statement lasting more than one hour. He has spoken about all other countries of the world. India is also considered as a developed country now. He stated that the UK has made so much money by sell-

ing patents to France and *vice versa*. I want to know how much we have earned as foreign exchange by selling our patents to other countries. During all these years we must also have developed some patents.

Shri L. S. Davar: Other countries...

Shri Bibhuti Mishra: I want to know in terms of money how many patents we have sold to other countries.

Mr. Chairman: How many patents we have sold to other countries and how much foreign exchange we have earned in that process?

Shri Bibhuti Mishra: When the witness knows so much about other countries, he must know something about our country also.

Shri L. S. Davar: I have already made my submission that since independence and since the Plan period, the quality of inventions and the number of inventions from within the country is increasing.

Mr. Chairman: He wants to know as to how many patents we have sold and how much foreign exchange we have earned as a result? If you have got the information then say so.

Shri L. S. Davar: I have no information on this except for a few patents of the railways which are being arranged to be exploited in other countries of the world.

Mr. Chairman: What is the foreign exchange that we have earned?

Shri L. S. Davar: I won't be able to give an answer to this.

Shri D. P. Karmarkar: You spoke about the international conferences. In that connection I want to put one question. Are you aware of the fact that in the international conferences ever since 1947 till 1965, there is a conflict between the developing and developed countries?

Shri L. S. Davar: We are aware of this.

Shri D. P. Karmarkar: Do you agree that what is being done is the best for our country?

Shri L. S. Davar: Yes, Sir.

Shri D. P. Karmarkar: The third question is this: Do you or do you not agree with the reasoning that under compulsory licensing, where a patentee is not having the capacity to produce and where he has not enough capital and know-how, when he applies for a licence, it is only after the Controller has satisfied himself that this can be issued?

Shri L. S. Davar: I think this needs explanation. I suppose I am not under cross examination to say 'Yes' or 'No'.

Shri D. P. Karmarkar: It is not a cross examination. I am a lawyer. I cannot cross examine a lawyer. But, what I want to know from you is this. There is a provision in the Bill similar to that for in the most industrially advanced countries that when the patent has not been put to the best advantage within a period of time, then it is open to any applicant who is fully competent to produce that stuff from the point of view of know-how, capital and everything else to have a compulsory licence under such circumstances. Would you or would you not agree with this?

Shri L. S. Davar: I agree that the compulsory licences are good. In fact that will act as a threat to the other persons to come and give us the know-how. If we have provisions without having a compulsory licence, perhaps the Government might say that we shall take away the patent and we are going to make use of it.

Shri D. P. Karmarkar: The provision is there that the Controller should satisfy himself before issuing a compulsory licence. Otherwise this question would not arise.

Shri L. S. Davar: I know that provision is already there in our Act.

Shri D. P. Karmarkar: Are you aware that in most countries including England, there is a system of issuing of compulsory licence? Are you aware of the practice there to make arrangements with other licensees when a patentee is otherwise too idle to make the best advantage of his patent? Do you agree with that practice?

You know that the number of applicants for compulsory licensing is very few. This provision for a compulsory licence is good where a patentee has not exercised the best care to make use of his patent to bring his product into commercial use and things of that sort and where the applicant is competent to produce this patent. In those circumstances the existence of this provision by itself automatically induces him to manufacture this product. Otherwise he would remain idle. Are you agreeing with this?

Shri L. S. Davar: I agree to this extent that compulsory licensing is necessary.

Mr. Chairman: In spite of a few applicants is there any country which has thought fit to revoke that provision? Do you agree with this provision?

Shri L. S. Davar: I agree with this because the compulsory licensing may be useful in one invention but it may not be useful in another invention. As I have explained just now to the hon. Members, for an invention of some nature, compulsory licensing is very necessary.

Shri D. P. Karmarkar: I hope you will agree that in order to speed up the applications recording of patents registered should be kept upto date?

Shri L. S. Davar: It is very necessary and I agree with this. The hon. Mem-

bers might be knowing that during the last four years or so, inspite of best efforts made, because of the shortage of staff, with the increase in the number of applications, indexing of the patents during the last four years has not been done. If I want to set up an industry, and wait to see what patent has been granted. I do not know as to why it has not been done.

Shri D. P. Karmarkar: We appreciate that.

Shri K. K. Warrior: From what you say, I see that whereas the developing countries including India do not get the advantage whereas the developed countries take advantage of the Patent Law. Is that correct? You have inferred like that and that controversy is unsettled.

Shri L. S. Davar: That is the bone of contention that out of the Patent Laws, it is the developed countries which take advantage of that. For that reason, the laws relating to compulsory licences are introduced in the various countries. But how far it is true there are no statistics to prove. Nobody has yet been able to say definitely as to how much more relative advantage the developed countries have derived as compared to the developing countries by the Patent Laws.

Shri K. K. Warrior: Our country has given patents to some of the foreign manufacturers where the manufacturing is not actually taking place here. How far have we stood in advantage or disadvantage in regard to that according to your knowledge?

Shri L. S. Davar: According to my knowledge, I would say the law should be so made that it should be conducive to the foreign patent-holder to come and work the invention within the country.

Shri K. K. Warrior: Do you agree that the patent right should not be given to any foreigner if he does not

intend to have the manufacturing also here?

Shri L. S. Davar: Whether you give the right to a foreigner or not, that point I might make it clear. In India there are only 5000-6000 patents granted at present every year. In other countries probably a million patents are being granted. We are free to use them. But can we use them? Have we used them? There were 3 million patents granted till 1961 in the USA while India had only one lakh patents and 2.9 million patents were available to us for use. Did we use them? Can we use them? No. It is the know-how which is important. As I have said, tender a small amount for the transfer and have the know-how. I can buy any patent copy for 2 shillings from England and use it here. Nobody can stop it. The value of the patent applies only to this country. Any patent granted anywhere in the world I am entitled to use so long as it is not patented here.

Shri K. K. Warrior: Why should the foreigners come up for patents here as long as they are not prepared to give the know-how as well?

Shri L. S. Davar: It is for us to pay for the know-how. If the laws are stable; if we can give them the inducement to bring the know-how, then, of course, they will bring the patent and the know-how. And the man who invests money in this country will know by virtue of the patent that he has got a certain amount of protection for his investment in that particular industry.

Therefore, patents are very important for a psychological effect on the man who has the know-how, and the man who is paying in the money from this country. If somebody comes to me and says: "Look Mr. Davar: Can you put in Rs 5 million in this industry? I will say: 'All right. I will start my industry. Tomorrow another person comes and takes away my

workmen and sets up another industry of a similar nature. What protection have I got?" Therefore, Patents Act has a protection for the man who invests money in that particular industry. That is the advantage of the patent system.

Shri K. K. Warrior: Is it not also a fact that the larger interests of the community should be looked into when protection is given to individual concerns or manufacturers? In that case, what is the amount of protection? How that quantum of protection is determined? What are the criteria for that? Suppose the market is a very limited one, then there is necessity for more protection. Suppose the market is unlimited as in India. Then why should that amount of protection be given to manufacturers' work where they have scope for abnormal profit?

Shri L. S. Davar: The remedy is compulsory licensing system. I find the compulsory licensing system provides that even when somebody is working the invention, another person can ask for licence for the same invention within the country provided he is prepared to pay royalty for it.

Shri M. R. Shervani: The basic idea behind the Patent law in various countries was to import the inventions for exploitation within the country. If that is so, why should at all a patentee be granted the exclusive right to import a product at the cost of manufacture in India. According to the present law you just patent a product for setting up a plant here, but do not manufacture it within the country.

Shri L. S. Davar: That is not the only advantage of the Patent Law. There are other advantages with it, namely, if there is an invention within the country, supposing that thing is imported and is covered by a patent, then I would be induced to manufacture it or invent a better type of thing. Take the case of Penicillin. Here is a commodity coming into the

market. I will invent a better penicillin.

Shri M. R. Shervani: With the technical know-how you cannot produce it if you patent a process here and a product. Then you just do not start manufacturing it here; you only import. In that case, why should that protection be there?

Shri L. S. Davar: Again when I said that it depends upon the nature of the invention, if it is of a complex nature you cannot help it. Nobody can deny that if a man possesses a particular technical knowledge even in this country, you cannot force him to give it to you—whether he is a foreigner or a citizen of the country. Supposing you take away his patent, how are you going to benefit?

Shri M. R. Shervani: My point is: that patent should be there, but that patentee should not be given the exclusive right to import the product. Let him put up a manufacturing plant within the country.

Shri L. S. Davar: The other thing as I said: what are the advantages of the patent system. There is also an international basis upon which you have to go. To-day you do not give the rights to another country. Tomorrow they will not give their rights to you.

Shri M. R. Shervani: That tomorrow is 50 years hence.

Shri L. S. Davar: It is not 50 years hence.

Shri M. R. Shervani: My second question is; we have said that collaboration and technical know-how is more important than the patent process. There are many patents all over the world. But you are not able to accept that technical know-how is not patentable. Therefore, we have to go for technical know-how, pay royalties or lump sum payment to get the know-how although the particular process is not patented. What harm

will come to the industrial development if we do not have any patent law. Actually industrial development depends upon the technical know-how.

Shri L. S. Davar: Where is the safety to the man who is giving you the know-how or the man who is receiving the know-how? As I just now explained, what was the position in England and America during the war period? The know-how was not protected by any patent. The Americans could not work the patents. Know-how is important.

Shri Arjun Arora: So you think it is useless. Even if you know what is contained in the patent, you cannot work it and you have to pay for the know-how.

Shri M. R. Shervani: The point was that technical know-how is not patentable and there is no guarantee that it will not be misused by somebody else. Technical know-how is given on certain payment and royalty. This technical know-how is protected without being patentable. Why cannot the invention also be protected because the man who invented is the best man to know the thing.

Shri L. S. Davar: This is a two-way trade. A man sitting abroad has a patent and the know-how. The man sitting here wants the know-how as well as the patent. He gets the patent to safeguard himself. Would you set up an industry, pay a large amount for the know-how and see that within the matter of one year your know-how is stolen and worked by other people?

Shri M. R. Shervani: Has the expansion of a patented industry been more during the life of the patent or has it been more in the decade following the life of the patent?

Shri L. S. Davar: It generally starts in the middle of the life of the patent. Science is advancing at such a rapid

rate that whatever was invented 10 years ago is useless to-day . . .

Shri M. R. Shervani: You have not answered my question. For instance, take any drug or any other mechanism. After the licence has been granted and the thing has been patented, people start putting up factories. My question is whether the expansion or production is great after the expiry of the patent or during the life of the patent.

Shri L. S. Davar: I think this question is related to various factors like the capacity of the man to commercialise the thing and manufacture the article on a large scale. Patent is not the only factory which is responsible. In any business whether there is patent or no patent, there are several factors which come into the picture. I think it would be very wrong on my part to give an answer that only patent is responsible for this and nothing else. There are various other factors. I shall give a very simple example. I remember in 1936 an elderly gentleman came to us and asked for a patent for a tiffin carrier. We thought the idea was silly as there were hundreds of carriers of this type. But we took the patent for him. Later on they were taken up by a gentleman in Poona and we were surprised to know, when an application for expansion was filed, that business for Rs. 1.20 crores had been done. How was it? I think it was entirely due to the efforts of the man who commercialised it.

Shri M. R. Shervani: You said that this patent business is two-way traffic. Before India can develop enough technical know-how and scientific knowledge to be able to have more inventions, it would be one-way traffic and harmful to the country. Even to-day it is one-way traffic. Should not our scientists be allowed to learn from the experience of others, practise it here and take it further on as in Japan?

Shri L. S. Davar: Barring two countries in the world—the United States

and Japan—in all other countries, the number of foreign applications is more than that of the local ones. Therefore, we cannot isolate ourselves and make laws for our own convenience. We have to move in the international field. Why are not other countries stopping the grant of patents? In England also, 60 per cent are foreign patents and in Holland, 80 per cent.

Shri Sham Lal Saraf: While deposing before the Committee, you said that some inventions may also be kept secret. Should it be made obligatory upon the inventor to get registered under the patent law?

Shri L. S. Davar: No, it is not obligatory. You can still work it secretly.

Shri Sham Lal Saraf: For the common good of the community, if a particular person or a unit is in possession of an invention which has got something novel in it and can be patented, why not make it obligatory under law on the person to get it registered under the patent Act?

Shri L. S. Davar: I think it is an inherent right of a person to disclose or not to disclose. There are hundreds of medical prescriptions which are passed on from one generation to another in this country. You can't force them to disclose.

Shri Sham Lal Saraf: With the social objectives of our Constitution in view, should it not be made obligatory on the individual to get it registered?

Shri L. S. Davar: I would put it this way. Instead of making it obligatory, which is not practical, it would be better if as in other countries, it is popularised more. Supposing in London, you ask a taxi man to take you to the Patent Office, he will immediately take you there; you need not tell him that it is in Chancery Lane. If you ask any man in America where the Patent Office is,

he will say it is in Washington. But here I know of a case where a man went to America to ask where the Patent Office is. It has not been popularised in this country.

Shri Dinen Bhattacharya: Is he an American citizen?

Shri L. S. Davar: Unfortunately, he is very much an Indian.

Shri Sham Lal Saraf: The days of individual inventors are gone. It is only the organised units that can invent things. But with your permission, I may mention a particular case in this connection. A few months back, an engineer who was drawing a handsome salary, went for a further course of training in some foreign country. On coming back, he invented a contrivance which was covered under the Patents Act. He did not have adequate finance. He shared the know-how with a financier who invested money on this. Later on the person who invested came to know of everything about this know-how and squeezed him out of that whole concern and the entire benefit has been going to the financier. How do you protect such inventors who make such inventions and which are patented under the law?

Shri L. S. Davar: There are two ways: one is, as I advocated way back in 1937 before the Shanmugam Chetty Committee, that, as in England, you should be able to buy a patent application in any of the post offices. The patent system has not been popularised in this country. Regarding the second point, about the case which you mentioned, the five-man world committee, on which I happen to be a member, is discussing the question whether the technical know-how should also be protected or not. And if we come to the conclusion that it should be protected, of course we can only make recommendations to the various Governments.

Shri Sham Lal Saraf: What is your personal opinion?

Shri L. S. Davar: Nothing can be done. That is why I said the lot of the individual inventor is not good.

Shri Sham Lal Saraf: It is accepted that particularly in the case of under-developed countries unless the know-how is imported from fairly advanced countries, the backward countries cannot progress much. Till now, as some friends have put it, comparatively a lesser number of these inventions or know-how could be imported to this country. What is the reason for that, and could you suggest ways and means as to how it will be possible to get more—whether it is from the Russian bloc or the American bloc or from any other country?

Shri L. S. Davar: It is a very long subject, and if the hon. Member is interested I would like to send him a copy of the paper that I submitted to the World Patents Conference on this subject.

Shri Sham Lal Saraf: Sir, the Secretariat may note it.

I have one or two more questions. I am not taking the industrial or the research aspect; I want to ask something about the compulsory licence. When a person or a group or a unit that is less resourceful is in a position to invent something and get it registered and they are able to derive some benefit, a person or a unit or an organisation which is more influential and resourceful and which can command a better organisation can force a unit like that under this compulsory licence. What safeguards have you got for genuine people, with genuine patents, to work up to the time they are permitted to work?

Shri L. S. Davar: That is absolutely a matter of discretion for the Controller. He has fairly wide powers, and that is what I have suggested, that the appeal from the Controller's decision should lie to the High Court and we have the highest regard for our judiciary—in order to safeguard the interests of every individual.

Shri Sham Lal Saraf: Everybody has been hearing about corruption in certain Government ranks and otherwise also. From experience we have seen, the more the discretion and the more the discretionary powers you give, the more chances for corruption. Are you of the opinion that people in the hierarchy of these officers, whether it is the Controller or anybody, should be given more discretionary power or less? Do you think that is the answer to this?

Shri L. S. Davar: I would tell the hon. Member one thing with pride. Throughout the world there is no patent office, including India, which is corrupt. That is one thing.

Shri Sham Lal Saraf: That is not my contention.

Shri L. S. Davar: I can stand up and say, and I want to challenge anybody to deny, that our patent office or any patent office anywhere in the world is free from corruption.

Shri Sham Lal Saraf: I would respectfully submit, it is agreed on all hands, a number of committees on this have been set up....

Shri K. V. Venkatachalam: He says, take away the word 'discretion'.

Shri L. S. Davar: The discretion is exercised on certain judicial principles and according to the law which has been laid down in relation to the grant of compulsory licences. Of course, every officer has got discretion.

Shri Sham Lal Saraf: In the present law, on an appeal from the Controller you can go to the High Court. The Bill that is before us intends to take away that right of appeal to the High Court and leave it to the discretion of the Central Government. If the *status quo* is restored that an appeal should go only to the High Court and not to the Central Government, again, for the reason that it would be interference on the part of

the executive in interpreting our law and our Constitution, may I know what is your reaction to that?

Shri L. S. Davar: I have already made my recommendation that an appeal from the decision of the Controller should be to the High Court, because, after all, the Central Government is again an administrative body.

Shri Sham Lal Saraf: My friend has said that the Controller's organisation is not working to the satisfaction of the people at the moment, for the reason that it has less staff, the staff is not enough to deal with the work that is coming up before them. May I ask him whether he means to say that physically they are not able to handle all the work that is coming up before them, or the working of the organisation is such that it cannot satisfy or meet with what this law demands from them in order to satisfy industry and all those covered under the Patents law?

Shri L. S. Davar: Physically, for the simple reason that the number of applications have increased. While in other countries one examiner is doing 50 cases in a year, in India an examiner is expected to do 200 cases a year. And he cannot do justice to the job properly.

The second thing is, the other job which has to be done, namely indexing of patents so that industry should know what new inventions have come, what new ideas have come into the market, that job is equally important, but they cannot do it, because the staff is short.

Shri Sham Lal Saraf: Do you think that the time has come when the non patentable inventions or novel things that may come to light need to be codified? Because, we find from experience that there is a lot of confusion to determine what is a patent and what is not. Do you think it should be codified, so that you know what inventions can come and be subject to patent?

Shri L. S. Davar: I would respectfully submit, we should say what are inventions but we should not say what are not inventions.

Shri Sham Lal Saraf: Therefore, when you codify, I think that is perfectly legal, and that should answer your feeling as well, the feeling that you have expressed just now.

Shri L. S. Davar: But nowhere in the world has any court yet been able to decide what is an invention and what is not.

Shri Sham Lal Saraf: Cannot we do a novel thing ourselves?

Shri L. S. Davar: No, we can only codify according to our experience. Sciences are of such a complex nature and the results can be such that you cannot codify these things. What you may think to be an invention, I may not think to be so. We handle the cases of Indian people in many countries of the world. The law is the same everywhere. The Indian patents office grants patent for something, the German patents office grants, but America refuses, England grants, but Japan refuses. They say, in view of the art or in view of the combination of the art in this patent, in that patent or the other, no inventive skill has been exercised as to be worthy of the grant of a patent. It is purely a matter of interpretation, how our office interprets and how other countries interpret. Therefore it is very very difficult to codify. We may codify as to what is an invention, but we cannot codify what is not an invention.

Dr. L. M. Singhvi: You have cited the UN report. I would like to draw your attention to what India has to say in respect of patents on drugs and articles of food. This is from the statement made on behalf of India:

"It is a fact that the price of the same drug varies considerably from country to country. The

question of public interest is involved in these cases."

In this connection, is it a fact that India has perhaps the highest scale of prices of drugs all over the world?

Shri L. S. Davar: I beg to differ on that point. India does not have the highest price or drugs.

Dr. L. M. Singhvi: Could you kindly give statement to substantiate your point of view?

Shri L. S. Davar: I have not got any figures off hand to present to hon. Members.

Dr. L. M. Singhvi: You can present it to us at a later date.

Shri L. S. Davar: A statement of the relative prices of drugs in various countries—I would be please to do that.

Dr. L. M. Singhvi: I have here several tables which go to show that the prices of drugs in India are anywhere between two to three times those prevailing in countries where they are manufactured or in other countries. Here I would cite a Senate Report which says:

"India which does grant patents on drug products provides an interesting case example. The prices in India for broad spectrum antibiotics aureomycin and achromycin are among the highest in the world. As a matter of fact, in drugs generally, India ranks among the highest priced nations of the world and gives an inverse relationship between per capita income and the level of drug prices".

Shri L. S. Davar: There has a lot of controversy about drug patents unfortunately. Firstly, in spite of our sending questionnaire to the chemical manufacturers' association and to various organisations, we have not been able to find what is the percen-

tage of drugs available in the country which are covered by patents. Is it one per cent or two per cent? Many people have the impression that milk of magnesia is covered by a patent. I am sorry to say it is not. We are talking of patents. What is the relationship of patents in regard to the prices of drugs. What is the percentage of drugs covered by patents? Is penicillin covered by a patent? No. The patent expired long ago. Why is the price high? There are other factors. Are we looking into those factors? Are we looking into the price structure of the manufacturers or the profit they are charging? Why give a dog a bad name in order to hang it?

Dr. L. M. Singhvi: I would appreciate if you can give figures to substantiate your contention, because there are figures made available to us. For example it has been reported to us that vitamin B-6 now manufactured by Merck-Sarabhai in this country is priced at Rs. 800 per kg. whereas the international price is Rs. 200 per kg.

Shri L. S. Davar: Is it covered by any patent?

Dr. L. M. Singhvi: That is what we would like to know—the part played by patents in India in this. Is it only a general phenomenon which is irrelevant so far as patents are concerned or is it because of patents coming into play?

Shri L. S. Davar: I would give the hon. Member some more information which appeared in *Fortune* two years ago only on this question, because this controversy is not only in this country; it is everywhere, even in America. As I have just now submitted, one of the proposals which I had made at the International Conference in February last year was: sell the products under a generic name and save the cost to government. This problem is there even in West Germany. Why are the prices of drugs high? I have known of the prices of three small tablets there—16 marks. Why so much?

I would give the hon. Member further information on the point he has raised.

Dr. L. M. Singhvi: The reply sent on behalf of India in the course of the UN study emphasises two factors particularly; one was the factor of the non-working of foreign patents and the other was the factor that patents were worked abroad wholly and not in this country, that is to say, patents were secured in this country merely to protect their export markets. What have you to say on these two factors?

Shri L. S. Davar: I would not make a general statement of this nature, nor would I agree with the statement of the Government unless statistics are produced. There are general causes, of what are known as abuses of the patent system which are known everywhere throughout the world.

Dr. L. M. Singhvi: Have you made any study of any such abuses being known in this country?

Shri L. S. Davar: I do not know any.

Dr. L. M. Singhvi: Would you say that most of the foreign patents which are secured in this country are not merely for the purpose of protecting export markets but also for developing indigenous production. If so, is this substantiated by actual experience.

Shri L. S. Davar: I want to give impetus to people who want to come and manufacture in this country. Give them tax relief, give them other facilities. They will come here. Why is it that in spite of the fact that India has been getting about a thousand million dollars from the aid-India consortium every year, the total foreign investment is 60 million dollars? Is it the fault of patents? No. It is the fault of our system. Have we given them certain reliefs? Have we given them certain impetus,

to come and work in this country?

Shri Arjun Arora: You want the whole economic policy to be changed merely because you consider that the patent system is not responsible for this state of affairs.

Shri L. S. Davar: I am saying that patent is not the only factor. I am saying the other way. There are other factors.

Shri Arjun Arora: Because of the patents, they can make money from India sitting at home.

Dr. L. M. Singhvi: It would appear that you are pitting one generalisation against another. I would like to know whether you have any specific experience or study made in regard to these two factors, namely, utilisation of patents in this country and the fact that patents are used mainly for protecting their own export markets rather than for developing them indigenously.

Shri L. S. Davar: I would support my answer by one simple example, namely this: notifications requesting people to take licences for foreign patents are periodically issued by us in newspapers, and you would be surprised that nobody comes forward. Hundreds of them appear in the newspapers. Out of a hundred, there may be one solitary reply by a postcard 'Please send me particulars of this patent'—that is the end of the enquiry. This is the interest we are taking when a foreigner makes a public announcement, 'I prepared to give a licence to you if you want to manufacture in this country'. Nobody replies. Can you say that the foreigner is exploiting? No.

Dr. L. M. Singhvi: Would you say that this is on account of the fact that economic and technological conditions in this country are not sufficiently developed?

Shri L. S. Davar: No, as soon as more and more industrialisation takes place, within the country, things will be all right. That is, my own view. If there is lack of industrialisation, how have things improved during the last ten years? Why are better class inventions coming from within the country itself? How are we producing more of the type of things which we want than the ordinary *chula* or hook or some such things we were producing in the prewar period?

Dr. L. M. Singhvi: I would like to know whether you would favour the system practised in South American countries as pointed out by you—Argentina, Chile, Columbia, Venezuela and also Spain and Belgium, the system of patent import so that we do not grant patents broader than the patents available to the inventors in the country in which they are first and originally registered.

Shri L. S. Davar: That is one system of granting patents, and I would recommend that system to our government too.

Dr. L. M. Singhvi: Do you think it has some advantages?

Shri L. S. Davar: Great advantages.

Dr. L. M. Singhvi: What are the main advantages?

Shri L. S. Davar: At present, the novelty in regard to the patent is limited only to what is available within the country. Therefore, if a man in Chile or Argentina has a patent or has made an invention which he brought out 20 years ago, he can still come here and take protection for 17 years. But if we give him protection for the confirmation, he will get only protection for the unexpired term in his own country. If he took out a patent 10 years ago and only six years are left, he will get protection in this country only for six years. Therefore, it is of great advantage of our country.

Dr. L. M. Singhvi: You have suggested that a separate enactment should be brought forth for providing in respect of restrictive conditions and no provision should be made in respect of restrictive conditions in this enactment. What are your reasons for making this suggestion?

Shri L. S. Davar: My reasons are these: the business restrictive practices are not only related to patents; as hon. Members are aware, the report of the committee which considered all the business restrictive practices, covers various subjects on this topic, and patents can be included in that as a separate enactment.

Dr. L. M. Singhvi: In another part of your memorandum, you have said that any provision for such restrictive conditions would only generate a psychological fear and it should be avoided altogether.

Shri L. S. Davar: We are now talking on two different points: one is whether it should be there, and the other is, whether it should form part of this Bill or not. I repeat what I have said: it will cause psychological fear and it is only in highly industrialised countries where they have got anti-trust laws, for example, in Germany and America and the United Kingdom, and not in every country, and every country has not got an anti-trust law.

Dr. L. M. Singhvi: Would you like a provision for final appeal to the High Court in all instances or a restricted right of appeal as provided in the present Bill in respect of only certain provisions?

Shri L. S. Davar: In all cases, the right of appeal should lie to the High Courts. I will give you a very concrete example: at present, when a patent application is opposed, and the Controller gives a decision, an appeal lies to the Central Government. I want to know one case where the Central Government has reversed the decision. All that the Central Government says is contained in just one stereotyped reply.

consisting of one line: "The Central Government has no reason to change the decision of the Controller." That is the way in which the appeals are heard. Therefore, I submit that all appeals from the decision of the Controller should lie to the High Courts.

Dr. L. M. Singhvi: You have mentioned, while commenting on several clauses of the Bill, that the Bill seeks to vest very wide and untrammelled powers in the administration. Would you suggest any specific means for curtailing, regulating or reducing such discretionary powers?

Shri L. S. Davar: My submission is, if you ask me candidly, there is nothing wrong with the present Act, except that if there is any particular provision which has to be changed and some people have to be satisfied, modify those provisions. No industry wants it and there has been no demand from the country, as far as I know, for a wholesale revision of the existing Act.

Dr. L. M. Singhvi: Would you say that, in spite of the fact that two committees, one being an informal committee and another being the committee, headed by Justice Ayyangar, who came to the conclusion that the present patent law has failed to fulfil the functions in the interests of the country?

Shri L. S. Davar: For the hon. Member's information, I may point out that the second committee was not a committee; it was a one man's report; evidence from the industry must be taken, evidence of the people who are interested. I would ask if Justice Ayyangar ever did it.

Dr. L. M. Singhvi: I would like to draw your attention to the opening portion of the report which says that such evidence, was taken, that the persons whose interests were involved were consulted.

Shri L. S. Davar: It is one thing to issue a questionnaire and it is another thing to take evidence, as the Joint Committee of Parliament is now taking. When an enquiry committee meets, it is one thing; but when a single person makes a recommendation, it is entirely different.

Dr. L. M. Singhvi: I would like to know whether you are in agreement with the report made by BIRPI, the international organisation, and with the model law which has been evolved by that organisation, and would you say that this legislation will fulfil the needs of our national economy or do you think various departures would have to be made from the model law evolved by BIRPI?

Shri L. S. Davar: Pardon me if I say that I have to answer that question at another conference and so I would not like to disclose here as to what my reaction to the BIRPI proposals is, but if the hon. Members want to know it individually, I would say it, but I would not like to disclose it openly, as to what my personal views on it are.

Dr. L. M. Singhvi: For the time being your answers are confidential. The evidence is confidential until it is placed on the Table of the House or is made public. I would not like to press you to answer anything like that, but it is an important question and we are in the course of evidence going to consider the relevancy and the adequacy of the model laws evolved by BIRPI.

Shri L. S. Davar: If this part of the evidence is not published, I am prepared to answer it.

Dr. L. M. Singhvi: That is for the Chairman to decide.

Mr. Chairman: The answer to this question will not be published; you can answer it.

Shri L. S. Davar: *.**

Dr. L. M. Singhvi: You have made a detailed reference to the examination of patents and you have indicated that the present system of examination in India cannot possibly meet the accidents which would be created or which are contemplated in the present Bill. Would you suggest any measures to make our examination system more adequate and more efficient?

Shri L. S. Davar: Yes, Sir. I have made a suggestion that so long as we are not highly developed, we should stick to the present system of examination that is a novelty in the country and no novelty from without the country. We should look into the literature available within the country in respect of any invention rather than look for literature throughout the world.

Dr. L. M. Singhvi: Would you suggest that we should set up a central institute within the country, say, a central international institute, as has been suggested in some quarters?

Shri L. S. Davar: The International Institute is at the Hague, and in view of the fact that there are great resources in the western countries, they are taking advantage of the institute, but I am sure our Government would not like to spend so much money in foreign exchange in going to that institute. If the system is maintained as it is,—the system of examination as it is in the present Act and not in the proposed Bill—then the staff of examiners can manage to do the work properly if the staff is further supplemented by a few more officers, rather than going into the wider novelty question as has been proposed in the Bill.

Dr. L. M. Singhvi: Would you suggest that the period of 10 years is

highly inadequate or just not quite adequate?

Shri L. S. Davar: I would say highly inadequate, more so because of the present provisions of the Bill which does not say how long it will take for the patent office to issue a patent. It may take them 7 or 8 years.

Dr. L. M. Singhvi: What in your views is a reasonable period?

Shri L. S. Davar: Before 1930, it used to be 14 years. Then it was increased to 16 years. Before the patent is granted and before the invention can see the commercial working of it or find a party who can work it, four or five years are normally lost out of the term of the patent.

Dr. L. M. Singhvi: What would you say if we make the period run from the time the patent is granted?

Shri L. S. Davar: I have said 14 years from the time the patent is granted.

Shri Kashi Ram Gupta: Do you think the present Act is much better than the proposed Bill?

Shri L. S. Davar: In my humble opinion, yes.

Shri Kashi Ram Gupta: Do you say the present Act does not need any amendments?

Shri L. S. Davar: It would require amendments of a very minor nature.

Shri Kashi Ram Gupta: What are they?

Shri L. S. Davar: I think it will be a pretty long job to enumerate them now.

Shri Kashi Ram Gupta: Out of 169 clauses in the Bill, you have suggested amendments only for certain clauses; Does it mean the other clauses are acceptable to you?

Shri L. S. Davar: In my opinion, the law for a developing country should be made as simple as possible. Unfortunately I have yet to see a masterpiece of obscurity as you find in this particular Bill. It has taken me 10 readings before I could understand what it implies. Either I am foolish or my 35 years of experience have all gone to waste.

Shri Kashi Ram Gupta: In your opinion, the present Act does not need any change at present?

Shri L. S. Davar: Not till we come to a certain stage of industrialisation should we modify our law.

Shri Kashi Ram Gupta: For what period should we wait for the amendment?

Shri L. S. Davar: So long as our plan periods go on, we should not touch the Bill.

Shri Kashi Ram Gupta: That means for an indefinite period.

Shri L. S. Davar: I think it will not go on indefinitely.

Shri Kashi Ram Gupta: Government propose to have the plan for the next 30 or 40 years.

On the one side you say great changes are going on and a thing which is good now may not be good after 10 years. Still you say the patent must be not below 10 or 15 years. This is a contradiction.

Shri L. S. Davar: There are two types of patents, of a simple nature and of a complex nature. The technology is moving very fast as far as

complex nature of inventions are concerned. 10 years ago, the speed of the aeroplane was 300 miles. Now it is 500 miles. In another 5 years it may be 1000 miles. But changes are not so swift in other fields. We must take the overall picture.

Shri Kashi Ram Gupta: Do you think for simple things, a lesser period may be prescribed?

Shri L. S. Davar: It is very difficult to confine it like that. Nowhere else in the world it has been done. It is not practical to do it.

Shri Kashi Ram Gupta: You say the time of individuals is gone and this is the time for collective working. Then why should you insist on a period of more than 10 years?

Shri L. S. Davar: These two are not inter-related. I say the period should be more because it takes some-time before that piece of paper takes a practical shape.

Shri Kashi Ram Gupta: If a limit is put on the time taken by government and if the clause is so amended that the time will start from the date on which the patent is granted, do you think 10 years should be sufficient?

Shri L. S. Davar: In my paper I have said that we want 16 years, but if you want to reduce it to 14 years, give it from the date of granting the patent.

Shri Kashi Ram Gupta: You say, in Russia there are two sorts of patents—authorship certificates and patents. You say that here also patents can be held by the individual?

Shri L. S. Davar: Yes.

Shri Kashi Ram Gupta: The individual here is nowhere except where he works in the government laboratories. How can an individual working in government laboratories get the sole patent for his invention?

Shri L. S. Davar: Patents are generally taken out in Russia by foreigners. But authorship certificates are taken out by Russian nationals.

Shri Kashi Ram Gupta: You said there is not much relationship between patents and prices. But members feel that this is a very big factor. How will you be able to differentiate between the two, whether the high prices are due to patents or other factors? What percentage of it is due to patents and what percentage due to other factors?

Shri L. S. Davar: Let us see what was the price of Milk of Magnesia 10 years ago and what is its price today. Let us also see what was the price of another antibiotic ten years ago and what it is today. If you see any difference in the relationship of prices, you can say the prices are higher in respect of patented articles.

Shri Kashi Ram Gupta: We have received a memorandum from Messrs. Remfry and sons who are also Attorneys. You are also an Attorney. They have tried to deal with each and every clause of this Bill, but you have given comments only about certain clauses. It means that so far as the other provisions of the Bill are concerned, you are agreeable to them.

Shri L. S. Davar: They are harmless.

Shri Kashi Ram Gupta: In other words, only this is harmful.

Shri L. S. Davar: I did not want to waste your time by referring to provisions which are harmless.

Shri Bade: Is it a fact that 90 per cent of the patents in the field of drugs and medicinals in our country is held by foreigners?

Shri L. S. Davar: I think it is the fault of Indian inventors.

Shri Bade: Is it a fact? All those who have submitted their memoran-

dum are against section 87 which provides that certain patents shall be deemed to be endorsed with the words "Licences of right". If it is a fact that the licences are held by the foreigners, why should you object to this section? Because, our nationals will be benefited by this provision.

Shri L. S. Davar: I agree with you on that point. But I think hon. Members will realise one thing. When we talk of medicines we are playing with human lives. Would you like to take a medicine which is being sold on the street corners? You may know that it is the same generic product but you would not buy it. If my child is not well, I would not care what I pay but I will buy a product which I know has been manufactured by reliable and reputable persons, a product which has gone through many tests.

Shri Bade: But we do not want to be exploited by the foreigners.

Shri L. S. Davar: I agree with you hundred per cent when you say that we do not want foreigners to exploit us. Let us take the know-how of the foreigners. When a man is possessing something you must induce him to give it to you.

Shri Bade: So, if the compulsory licence of patents is accompanied by know-how then you have no objection for section 87?

Shri L. S. Davar: Here again you cannot force a person to give the know-how. He will say "here is the patent, you can do whatever you want". It may be that 90 per cent of the patents in this country are held by the foreigners but let us see how many patents are there. Here we have 2,000 as against 20,000 patents granted in America and Germany. Why can't I pay a few rupees and get some of these patents? I can, but I know that I cannot make the drug as effective and as good as the person who has the

know-how and has developed the drug.

Shri Bade: In countries like Israel and Turkey they are imitating Belgium in this respect.

Shri L. S. Davar: The point is that each country is trying to have perfect drug patents but nobody has yet been able to find out what the real solution is. Everywhere people think prices are high. But what are we going to do about it? Even America says the prices are high. So also Germany and England. Recently, there was a case in a High Court in England about the right of the Government to make use of an invention in the interests of the public. For some time when they imported drugs from Italy, they found they were sub-standard drugs.

Dr. M. M. S. Siddhu: Italian drugs are not sub-standard. You should be factual when you refer to these things.

Shri L. S. Davar: I will put it in a different way. Are you going to be sure that a drug manufactured by any person is as good as the drug manufactured by the person who has invented it?

Dr. M. M. S. Siddhu: Sir Alexander Fleming discovered penicillin and gave it to the world. Since then penicillin is made all the world over. Is it being suggested that the Penicillin now being manufactured in various countries is different from the one invented by Sir Fleming?

Shri L. S. Davar: May I tell you one thing. I will show you a remark by Sir Fleming where he said the greatest folly which he did in his life was not to patent his drug. I have got that in writing.

Shri Bade: Section 35 refers to secrecy directions relating to inventions relevant for defence purposes. The same provision is there in the model law for developing countries. I hope you have no objection to that provision.

Shri L. S. Davar: None whatsoever when it is for the defence of the country.

Shri Bade: Not only for defence but for health also.

Shri L. S. Davar: Health is a very wide term. If my teeth are bad I can say that my health is bad. We must say something specific. Let us not generalise things.

Shri Bade: Since 90 per cent of the patents are held by the foreigners and none by our people it is being suggested that the patent law should be abolished and there should be no patents as long as there are no reciprocal arrangements. What have you to say in the matter?

Shri L. S. Davar: I would simply say this. All right, let us abolish it. But what are we going to gain? As against 1,500 or 2,000 patents of drugs which are taken out in India, there are 15,000 patents for similar drugs in America. Am I not right?

Shri Bade: The only point is that there should be no monopoly.

Shri L. S. Davar: I am coming to that. Those 15,000 patents which have been taken in America are free for us to use. I do not have to pay any royalty. But why is it that we are not using them again, because we will have to have the know-how. As I said, 3 million patents were granted till 1951 in America as against 1 lakh in India. These 29 lakh patents are available to us free, without any royalty. All that we have to pay is 50 cents for the patent specification. You can take it from anywhere in the world and use it; nobody is going to stop you from doing it. There is no monopoly. Patent is applicable only to that country; nowhere else. An American patent is applicable only in America. If it is not patented here, I can copy it, anybody can copy it.

Shri Bade: I will now come to the provisions of the Bill. We are exploited by the foreigners in the field of medicine. We have seen so many booklets about the difference between the international price and Indian price of medicine. So, we have to do something to put a stop to this exploitation. Now, regarding the compulsory licence, should it be given by the Controller or by the court?

Shri L. S. Davar: Court procedure becomes too expensive and too lengthy. In France what they have done is that they have appointed a committee of medical experts which goes into this question. I have suggested that we might adopt that practice, as is done in France, that a committee of medical experts be appointed by the Ministry of Health of the Government of India to go into the question whether the licence for drugs should be given or not.

Shri Bade: This again will be a lengthy procedure.

Shri L. S. Davar: These are alternative procedures.

Shri Bade: You have said that you cannot define "invention" while this

Bill tries to define "invention" Some suggestions have been made that it should be "new" or "useful". What is your opinion about this?

Shri L. S. Davar: I would say that the addition of the word "useful" is good. Whether it is there or it is not there, if the invention is not useful, it is of no use to the public and nobody is going to bother about it. But my objection is: define what is an invention if you can, although the courts have not yet been able to give a proper definition, but do not say what is not an invention. That is the only submission I have made in my memorandum.

Shri Bade: If it is an invention, it is new; if it is old, it is not an invention. So, what is your view about the word "new"?

Mr. Chairman: New is new. We will adjourn here now and continue the examination of Shri Davar tomorrow at 14.00 hours.

(The witness then withdrew).

The Committee then adjourned.

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965**

Friday, the 28th January, 1966 at 14.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Dinen Bhattacharya.
7. Shri Bibhuti Mishra.
8. Shri P. C. Borooah.
9. Sardar Daljit Singh.
10. Shri Basanta Kumar Das.
11. Shri V. B. Gandhi.
12. Shri H. K. V. Gowdh.
13. Shri Kashi Ram Gupta.
14. Shri Prabhu Dayal Himmatsingka.
15. Shri Madhavrao Laxmanrao Jadhav.
16. Shri Mathew Maniyangadan.
17. Shri M. R. Masani.
18. Shri Braj Behari Mehrotra.
19. Shri Bibudhendra Mishra.
20. Shrimati Sharda Mukerjee.
21. Shri P. S. Naskar.
22. Shri Chhotubhai M. Patel.
23. Shri Naval Prabhakar.
24. Shri R. Ramanathan Chettiar.
25. Shri Sham Lal Saraf.
26. Shri A. T. Sarma.
27. Dr. C. B. Singh.
28. Dr. L. M. Singhvi.
29. Shri P. Venkatasubbaiah.
30. Shri K. K. Warior.
31. Shri Balkrishna Wasnik.
32. Shri Ram Sewak Yadav.

Rajya Sabha

33. Shri Arjun Arora.
34. Shri Babubhai M. Chinai.
35. Shri Vimalkumar M. Chordia.
36. Shri D. P. Karmarkar.
37. Shri B. T. Kulkarni.
38. Shri P. K. Kumaran.
39. Shri Shyamnandan Mishra.
40. Shri Dahyabhai V. Patel.
41. Shri Mulka Govinda Reddy.
42. Shri M. R. Shervani.
43. Dr. M. M. S. Siddhu.
44. Shri Dalpat Singh.
45. Shri R. P. Sinha.
46. Shri T. N. Singh.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
4. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

- I. L. S. Davar & Co., *Patent & Trade Mark Attorneys, Calcutta.*

Shri L. S. Davar.

- II. Remfry & Son, *Patent & Trade Mark Attorneys, Calcutta.*

1. Mr. Harold Holloway.
2. Mr. Desh Pal Ahuja.
3. Mr. Baldev Chaturbhuj Ojha.

**I. L. S. Davar & Co., Patent and Trade
Mark Attorneys, Calcutta.**

Spokesman:

Shri L. S. Davar.

*(The Witness was called in and
he took his seat)*

श्री चौरड़िया : दावर साहब, यह जो आपने मेमोरैंडम दिया उसमें आपने बताया कि प्रोसेस पेटेंटिंग करने से इन्वेन्शंस में भी दिक्कत होगी और कई तरह के रिमार्क्स दिये तो मैं जानना चाहूंगा कि जिन देशों में प्रोसेस पेटेंटिंग होती है जैसे जर्मनी, स्विट्ज़रलैंड बगैरह में वहां इन्वेन्शंस जब ठीक तरह से हो रहे हैं तो अपने यहां इन्वेन्शंस क्यों नहीं हो सकेंगे ?

Shri L. S. Davar: The reply to that is that, so long as the product covered by that particular process is patented or is given protection, there should be no objection at all. I do not recommend that the product as such should be given protection, but the product according to that particular process should be given protection, so that others can also find out alternative processes for manufacturing a similar product. That is exactly what is happening in other countries where they have only the process and not the product *per se*. It is only in America that the product *per se* is covered by a patent, but in many other countries it is the product covered by that particular process which is patented and my submission is that that should be the law in this country.

श्री चौरड़िया : यह जो आप बता रहे हैं कि कुछ मामलों में प्रोडक्ट को पेटेंट किया जाय और कुछ मामलों में प्रोसेस को पेटेंट किया जाय तो ठीक रहेगा

श्री एल० एस० दावर : यह तो मैंने नहीं कहा ।

श्री चौरड़िया : तो जब मिक्स्ड है, हो सकता है, प्रोसेस भी कहीं पेटेंट होता है, कहीं प्रोडक्ट पेटेंट होता है, और कुछ कम्पोजिटीज ऐसी हो सकती हैं जिसमें केवल प्रोडक्ट को पेटेंट करवाना पसन्द करते हैं, तो वैसी सूरत में आप क्या सजेस्ट करते हैं ?

Shri L. S. Davar: For example, in the case of alloys which relates to the metallic industry, generally it is the composition and the end product which are covered by the patent. In such cases, it is preferable to give protection for the end product and not only for the process. It all depends upon each individual case—what type of invention it is—but the general principle which should be followed is that the end product should be covered only in respect of the process which has been developed for producing that end product.

श्री चौरड़िया : आपने यह बताया मेमोरैंडम में कि पेटेंट की अवधि दस या चौदह साल की जो है यह बहुत कम पड़ती है इन्वेन्टर्स के हिसाब से और हमारे ख्याल से उपभोक्ता के हिसाब से बहुत ज्यादा है, तो दोनों का इन्टरेस्ट सेफगार्ड हो सकें उस दृष्टि से कुछ इसका क्लासिफिकेशन करते हुए आप बता सकेंगे कि कौन सा प्रोडक्ट किस प्रकार कब तक के लिये पेटेंट किया जाय ?

Shri L. S. Davar: The law has to be uniform in all cases, but as I made my submission yesterday to the hon. members, it takes some time before what is written on the paper takes a practical shape. It is for this reason that I have suggested that the term of the patent should not be reduced.

श्री चौरड़िया : हमारे सामने ऐसे भी उदाहरण हैं कि जो चीज आज आठ आने में मिलती है वह किसी जमाने में 14 रु० में मिलती थी और उसकी प्राइस कम तभी हुई जब उसके पेटेंट की अवधि समाप्त होने के बाद वह चीज मार्केट में आयी तो ऐसी स्थिति में ज्यादा समय रखा जाता है तो

उपभोक्ता को उसमें कठिनाई पड़ेगी तो इसके बारे में कुछ सेफगार्ड और हो सके, कन्ज्यूमर का भी इन्टरेस्ट सेफगार्ड हो सके, इसके लिये कोई सजेशन आपका है ?

Shri L. S. Davar: But the hon. member has to see this: we must also benefit by the experience of other countries. After all, each country makes laws for its own benefit. If we take guidance from other countries—and that is what we have done—from the experience of highly industrialised countries or the countries which went through the same stage of development as we are now going through, they have found that the period of sixteen or seventeen years is the right period within which an invention can properly be put into a practical shape. It is very difficult to say for a particular invention the term should be so much and for another the term should be less. There should be one uniform law in regard to all inventions and we must follow the practice, what is being done in seventy or eighty other countries.

श्री चोरडिया : आपने यह बताया कि एग्जामिनेशन का व्यवस्था जो रखी गई है उसके आप पक्ष में नहीं हैं और कारण आपने बताया कि पेटेंट आफिस डिले होता है और इससे दिक्कत होती है तो अगर इन कठिनाई को दूर कर दिया जाके टेक्निकल स्टाफ बढ़ाकर या किसी तरह से तब आपकी एग्जामिनेशन व्यवस्था से कोई विरोध न होगा ? यही एक विरोध का कारण आपका है या कोई और विरोध इससे आपको है ?

You say that the examination should not be there.

Mr. Chairman: He never said that. He said the staff has to be increased. He said it may take seven years, so increase the staff. That is what he wants.

Shri Bade: Does he want that as soon as the application is filed it

should be accepted without examination?

Mr. Chairman: He wants examination, but he says that can be done only by increasing the staff. I do not think there is any point in that.

Shri Vimalkumar M. Chordia: On page 8 of their memorandum it is said:

"The present draft Bill in India proposes examination system similar to that which exists in other developed countries. If that is adopted, the strength of technical staff will have to be increased five times. Such staff is not available. Even with the present system which is less stringent than proposed, the staff is not enough to cope with the work. The Patent Office has since the last four years been neglecting its primary duty of indexing patents so that under present conditions any one cannot make a search in the Patent Office to ascertain if a certain invention has been patented during the last 4½ years."

यह जो इन्होंने कहा उसके ऊपर से यह इन्फरेंस ड्रा होता है कि he is not in favour of examination.

Mr. Chairman: Is that your opinion?

Shri L. S. Davar: No, Sir, I am in favour of examination.

I think this is a purely technical matter which the hon. Member may like to know and if you permit me I can give an explanation as to what is the practice and what I want to be done.

The practice at present is that when an application is filed, the application is accompanied by a technical document, what we call the specification. It is referred to the examiner and there is a certain provision, namely section 5 of the existing Act, under which the examiner makes a search or makes his report with regard to the application which has been filed.

What does the examiner do at present, or what is he expected to do? According to the present Act the examiner, in order to find out whether the invention is novel or not, what part of it is novel, makes a search through the records of the prior Indian patents which are lying in the Indian patents office or such publications which are available within the country. That is the practice in India. In some countries, for example, Germany or the United States, the practice is, that they search through the literature of the whole world. They have got the facility to make it; we have not got it. We have not got such big libraries, nor have we got patent specifications of all the 110 countries in the world who have got their patents system.

According to the proposed Bill it says the novelty examination shall be extended to novelty anywhere in the world, which in my humble submission is impossible with the present staff, and although I have said that the staff will have to be increased by five times; it may perhaps by twenty times.

श्री चौरङ्गिया : आपने इसमें टाइम लिमिट के बारे में बताया है कि पहले टाइम लिमिट थी कि पेटेंट इतने दिन के अन्दर हो जाय और जब वह इसमें से हटा रहे हैं, तो आप क्या सुझाव देना चाहेंगे कि कितना टाइम लिमिट इसमें रखा जाना चाहिए ताकि पेटेंट के लिए अप्लाई करने वाले को दिक्कत न हो और कंट्रोलर भी उसको कर सके ?

Shri L. S. Davar: At present a patent must be accepted within a period of eighteen months or an extended period of twenty-one months, and the patent must issue within a period of two years, or thirty-one months including the extended period. In the proposed Bill there is no provision that the patent must issue within a specified time. And my submission is, if you do not do that, then the

patent office can sit over it for several years. And they may have to sit for several years if they have to look into the novelty of the inventions in relation to what is available throughout the world. It may take twenty years before the patent is granted. And therefore I have suggested that the present system of the search for novelty should remain as it is and that a time-limit should be specified within which the patent must issue. Every inventor is like a child. Let us take the case of an individual inventor. He is very keen, firstly whether he is going to get a patent or not. If he is to hang on for five, six or seven years, he loses interest.

Mr. Chairman: You have not given any example where it has taken five or seven years.

Shri L. S. Davar: Now it cannot take.

Mr. Chairman: You mean, you expect it would take seven years.

Shri L. S. Davar: At the present moment the patent must issue within thirty-one months latest. But there is no provision in the Bill before us that the patent must issue within a specified period.

श्री चौरङ्गिया : पेटेंट करवाने के लिए जितना टाइम लिमिट आप रखना चाहते हैं, आपने जो पेटेंट रजिस्टर्ड करवाये उनके आधार पर क्या आप बता सकते हैं कि इन-इन चीजों के लिये इतनी-इतनी अवधि तय कर दी जानी चाहिये जिससे कि अप्लीकेंट को भी कठिनाई न हो और पेटेंट आफिस भी उसको आसानी से कर सके और काम जल्दी हो सके?

Shri L. S. Davar: This is again a related matter in relation to examination. If you ask the patent examiner to make a search through all the records available in the world, then it is impossible to lay down the time-limit, because he has neither the facilities, nor the time, nor the means to

do it. And therefore these two things are inter-related. If we stick to the present system, then we may say, instead of two years, or thirty-one months, the patent must issue within the maximum period of three years and not more.

Shri R. Ramanathan Chettiar: Since the time at our disposal is limited and there are many Members who would like to put questions, it is better if the questions are restricted to two in number. Otherwise the time must be extended.

Mr. Chairman: I shall leave it to the good sense of the Members.

श्री अचल सिंह : जो मेमोरेण्डम हम को प्राप्त हुए हैं उनमें से कुछ ने भारत जैसे देश में पेटेंट्स एक्ट की अनावश्यकता बताई है तो इसमें आपकी क्या राय है ?

श्री एल० एस० दावर : राय के मैं बरखिलाऊ नहीं हूँ लेकिन पेटेंट्स एक्ट तो होना ही चाहिये ।

श्री अचल सिंह : भारत एक गरीब देश है तो इस बिल में क्या-क्या सुधार किये जायं ताकि दवाओं के दाम, इंजैक्शनों के दाम जोकि बहुत ज्यादा हैं वे सस्ते दामों पर जनता को सुलभ हो सकें ?

श्री एल० एस० दावर : यह कमशिल मेटर है । गवर्नमेंट के पास बहुत ताकत है कि प्राइस कंट्रोल कर सके पेटेंट माल की । मैंने कल भी अर्ज किया था कि एक मामूली चीज है और सब दवाएं पेटेंट में नहीं आतीं । इतनी दवाओं में कोई पेटेंट नहीं है लेकिन उनके दाम ज्यादा हैं वह बातें तब प्राइस स्ट्रक्चर की होती हैं वह इतना पेटेंट से रिलेशन नहीं रखतीं ताकि आप यह कह सकें कि खाली पेटेंट की ही वजह से दवाओं के दाम बढ़ते हैं ?

श्री अचल सिंह : जो दवाएं पेटेंट हैं उनको वही बना सकते हैं, वही कीमत

निर्धारित कर सकते हैं अगर आम लोग बनायें तो वे सस्ती मिल सकती हैं ।

श्री एल० एस० दावर : बनाने का तरीका भी तो चाहिए । लाइसेंस फ्री अगर कोई पे कर के बनाये तो वह लाइसेंस एक्ट में प्रोवाइड किया हुआ है जो बनाना चाहे आगे भी पुराने एक्ट में यह था कि पेटेंट होने के बाद कोई टाइम लिमिट नहीं थी । कोई भी आदमी जो बनाना चाहे और कहे कि मैं यह दवाएं बना सकता हूँ और सस्ती बेच सकता हूँ मुझे लाइसेंस मिल जाना चाहिए तो वह मिल सकता था लेकिन अफसोस की बात यह है कि दस-पन्द्रह साल से खाली 3-4 आदमियों ने लाइसेंस की अर्जी दी है तो इसका क्या मतलब निकलता है मेरी तो समझ में नहीं आता । मेरी राय तो यह है कि हर एक चीज के लिए कुछ न कुछ एक तरीका होता है बनाने का । आप चूर्ण भी बनायें तो भी एक तरीके से बनाया जाता है । एक कुक खाना बनाता है वही दूसरा कुक अच्छा खाना बनाता है ।

The same rule applies as far as medicine or any other commodity is concerned.

Shri R. P. Sinha: The witness has been pleading for a longer period of patent rights. I would like to seek this clarification from him: what is the motive in asking for a longer period? Is it because the company concerned may not get adequate return on the investment? Here is a Reserve Bank Bulletin which made a study of the investments and profit earned by the pharmaceutical and other chemical industries. From this it is clear that these companies make adequate profits in a very short period. I find that the average for 1961 to 1962-63 of gross profits as a percentage of the total capital employed works out to 17.7 per cent....

Mr. Chairman: The time is very limited. The hon. member may ask his question.

Shri R. P. Sinha: We have to make up our mind on the question.

Mr. Chairman: Yes; he may proceed.

Shri R. P. Sinha: In the pharmaceutical industries the profit was 22.9 per cent; in the basic industrial chemicals it was 20.5 per cent; in the other chemicals it was 10.8 per cent; and the average of all the three works out to 17.7 per cent. That was the return on capital invested—gross profit. What does it mean? If a man invests Rs. 100, in ten years' time he will get Rs. 170 by way of return on the capital invested. When we take into account the foreign participation and not the indigenous capital, we find that the total capital employed by the foreign participants was Rs. 14.87 crores and the dividend remitted was Rs. 204 lakhs, i.e. about Rs. 2 crores.

Mr. Chairman: What is the hon. member's question? The witness knows all these details.

Shri R. P. Sinha: But the Members may not know.

Mr. Chairman: The Members also have been supplied with these: The hon. member may now ask his question.

Shri R. P. Sinha: One more point and I would finish with that. The remittances on royalty and technical service on all these investments were Rs. 5.28 crores.

Shri L. S. Davar: In how many years?

Shri R. P. Sinha: For the period, 1961 to 1962-63, i.e. in one year, on an investment of Rs. 14 crores, they took about Rs. 2.04 crores by way of dividend remitted. During 1956-63, they took away Rs. 5.28 crores by way of remittances on royalty and technical services. All these show that they get adequate return in ten years' time. You have been pleading that the patentee will not be able to get adequate return on the capital invested. If you have got some figures to contradict my statement, we would like to have them. The pharmaceuti-

cal industry gets a profit of 22.9 per cent.

Shri L. S. Davar: My first observation to that will be: how is that related to patent?

In any pharmaceutical industry, as I said yesterday, it is perhaps 2 per cent of the products which are covered by patents. Milk of magnesia is not covered by a patent and there are hundreds of products which are not covered by patents.

Shri R. P. Sinha: Whether it is covered by patent or not, the return is the same.

Shri L. S. Davar: If the return is higher, surely the Government have powers to reduce the profit. But that has nothing to do with patents.

Shri R. P. Sinha: Why do you want 14 years?

Shri L. S. Davar: Experience throughout the world has shown that this is the minimum adequate period within which an invention can be given a practical shape. Are we going against the experience of 70 or 80 countries?

Shri R. P. Sinha: Can you give us the figures of other countries to show that they have not been able to get adequate return on the capital invested in ten years?

Shri L. S. Davar: I am sorry I was not prepared for this question as to what have been the returns in other countries, but I have some figures and if the hon. members want, I can supply them.

Shri R. P. Sinha: The return on investment is higher in a developing country than in a developed country.

Mr. Chairman: We can have this information from the Government.

Shri R. P. Sinha: You want fourteen years. We are prepared to concede fourteen years if you give us facts and figures to show that the return will not be adequate if it is less than ten years.

Mr. Chairman: The Government spokesman will explain to you.

Shri R. P. Sinha: I leave it to the witness. If he wants to say something he may do so.

Shri L. S. Davar: I have already made my submission that it is not because of the profits earned during a particular period; it is the development of an invention which according to the experience of other countries takes a certain period of time before the thing can be put into a patent.

Shri R. P. Sinha: Every country makes its own patent law to suit the genius or the interests of the country.

Shri L. S. Davar: Correct.

Shri R. P. Sinha: We are now enacting our law for the benefit of our own country. We are anxious to have the flow of information and know-how from other countries. If you can give us figures to prove that for less than fourteen years there will not be adequate return, we shall consider it. But our experience in the country shows that you can get back your capital in less than ten years.

Shri L. S. Davar: That is in respect of those pharmaceutical preparations which have already been developed and are in the process of manufacture. Patents only relate to a new product or process. When we talk of any normal pharmaceutical preparation the process has been developed. No time is spent in developing from the very beginning. When you talk of patents you have to develop from the initial stages, give it to the guinea pigs and give it to human beings, and it takes some time before you can say that it can be safely taken by human beings. The hon. Member will agree with me that no pharmaceutical preparation of a drastic nature can be just doled out to human beings unless it has gone through proper tests.

Shri R. P. Sinha: I will put only one more question as other Members are waiting. We have found from the report of the Haffkine Institute that the patent system in India has

strangled the growth of the pharmaceutical industry and the drug industry in this country. And they have given instances of their own experience that in the case of cholera and plague drugs the foreign patent holders did not permit the processes to be developed and the products to be marketed here for seven or eight years and they carried on litigation in order to stop the processes from being used. They have given figures to show that what they could manufacture in India for Rs. 20 they had to import at Rs. 259. I am talking of the plague medicine—I do not recollect the technical name. You say that the patent system should be so devised that it should help the growth of the drug and the pharmaceutical industry in the country. That is what we are trying to do. But in your submissions and in your memorandum you have been saying that this will rather retard the growth of this industry. What have you to say to that?

Shri L. S. Davar: To what year does that report of the Haffkine Institute relate?

Shri R. P. Sinha: It is the latest report.

Dr. M. M. S. Siddhu: That was started in 1939, that medicine.

Shri L. S. Davar: May I submit to the hon. Member that in 1952 or 1953 the Indian Patents Act was amended by the introduction of section 23 CC which says:

“Without prejudice to the foregoing provisions”—

this relates to food or medicine—“where a patent is in force in respect of a substance capable of being used as food etc., the Controller shall on application”—no time limit is provided, the moment a patent is granted anybody could go and ask for licence—“the Controller shall on application made to him by any person interested, order the grant to the applicant of a licence under the patent on such terms as he thinks fit.”

I am surprised why in spite of this provision the Haffkine Institute . . .

Shri D. P. Karmarkar: What happened in 1939.

Shri L. S. Davar: In 1953 the Act was amended. But in spite of the amendment of the Act it is rather unfortunate that very few people have come forward for this licence.

Dr. M. M. S. Siddhu: When by the order of the Madras High Court sulphathycol was allowed to be imported, the price came down to nearly one-fourth the cost.

श्री ब्रज बिहारी मेहरोत्रा : आपने कहा कि पेटेंट की मियाद हर चीज के लिए एक ही होनी चाहिए तो एक चीज तो वह है जिसमें आदमी साधारण बुद्धि लगा कर बना लेता है और उसे पेटेंट कर देता है जैसा कि आपने टिफिन कैरियर्स का जिक्र किया था और एक वह चीज भी हो सकती है जिसमें कि वह आदमी वर्षों खोज करता है और तब उसके बाद कोई चीज का इन्वेन्शन करता है तो दोनों को एक ही मात्रा में समय देना यह कहाँ तक मुनासिब होगा ?

श्री एल० ए० दावार : उसको तो देखेंगे कि किस को कितना समय देना चाहिए, अमुक को कितना समय देना चाहिए और दूसरे को कितना समय देना चाहिए। उस में तो और ही ढंग लगाया जायगा।

And where is the proof that the man has taken such a long time in inventing an article? All that proof will have to be submitted. Let us go by our past experience. Nobody has said that "I should be given more protection". But apart from that I am glad the hon. Member raised this question. In the present Act there is a provision that if a man has not made sufficient profits commensurate with the nature of the invention and the time and money spent in developing the invention, he can go to Government and ask for an extra provision of five years and in extreme cases ten years. Unfortunately, Sir,

that provision has been deleted in the present Bill. I have to recommend that provision should not be deleted. That meets exactly the point that we have raised now.

Dr. M. M. S. Siddhu: I would like Mr. Davar to recall that he said that the imports of streptomycin were sub-standard. I would like him to see what has been stated in reply to a question in the Parliament in U.K. The Minister said that arrangements were made for inspection of overseas factories and samples of each batch were taken on importation and tested by the Government chemist for compliance with the British Pharmacopoeia requirements before issue to hospitals. Regarding the view that non-patented country's products are substandard, I would like to know what you have to say in this regard.

Shri L. S. Davar: My observations which were made yesterday were based upon what I heard only about 3 months back from people in the pharmaceutical industry, who were representing England at a particular conference. I have no citation to place before the hon. Members. I have no reason to disbelieve what the hon. Member is saying, but I am only quoting what I heard about 3 months ago.

Dr. M. M. S. Siddhu: I would tell one instance. Alexander Fleming was taken round the United States. He was asked by the head of the firm which had become the largest manufacturer of penicillin in the world why he had not insisted on the rights and rewards which would enable him to live in the manner fit for so great a benefactor of mankind. 'I have never thought of it'—Fleming replied. Fleming was actually held in greater esteem because of his lack of commercial acumen.

Shri L. S. Davar: Not just now but at a later stage if the hon. Member so desires, I will place before you the evidence given in the Keafuour Committee in America and what were the observations of Fleming himself and

what were the observations also of the other people who were working along with Mr. Fleming after he went from England to the U.S.A.

Dr. M. M. S. Siddhu: The Reserve Bank, in its bulletin has observed: "Lumpsum royalty is treated as technical fee, while a so-called technical fee linked to output or sales is considered as a royalty". What is the effect of this observation? The question of royalty payment, when it is linked with the technical fee, becomes in such a way, a bigger thing than the mere royalty. What he has to say about the observations of the Reserve Bank?

Shri L. S. Davar: The Reserve Bank figure did not indicate separately how much was paid as royalty for the patent and how much was paid as royalty for the know-how. I have the figure, not just now here, but I have the figure with me and I don't think I will be wrong in saying that that figure is very very much less than the figure I quoted yesterday. As far as royalty payments on patents made during 1958-62 is concerned, I have the figures of the Reserve Bank with me, but not here just now. I can send it on to you.

Dr. M. M. S. Siddhu: The recent cases did not relate to pre-1951 period, but they relate to post-1951 period. Even if the Indian manufacturer were to work for no loss will it not be correct for right of licence to be given for the drugs?

Mr. Chairman: It is a matter for the committee to decide.

Dr. M. M. S. Siddhu: When I quote cases which are post-1951, that makes the difference in the answer.

Shri L. S. Davar: I have only to repeat my observations which I made before that after 1952, there was provision in the Act that anybody can ask for the licence. If people have not done it, it is entirely their fault and not the fault of the system, nor of the patent Act.

Mr. Chairman: Are you satisfied with his answer? It is for the committee to decide. It is for you to decide.

Dr. M. M. S. Siddhu: Is it a fact that the products of the patentee countries are imported in our country at very high price. Is it a fact that the products are patented, not the processes?

Shri L. S. Davar: Even according to the existing practice, it is the product made by a particular process. Supposing product 'A' is covered by patent in India, the protection is limited only in as much as the scope of the process is concerned. If anybody else or any other country can find out alternative process, he is entitled to get a patent for the same.

Dr. M. M. S. Siddhu: Production-cum-process is patented.

Mr. Chairman: It is to be interpreted by us.

Dr. M. M. S. Siddhu: He would like process to be patented?

Mr. Chairman: He says his view.

Dr. M. M. S. Siddhu: Would he like the process to be patented alone?

Mr. Chairman: Is there any answer?

Shri L. S. Davar: Product should be patented or covered by a patent only to the extent of the process by which that product is made and not product *per se* which is the position in America. In America you get patent for product *per se*, but here you don't get that protection.

Dr. M. M. S. Siddhu: Will the industry ask for still higher return over 20 per cent, while the 6 per cent which they spend on research is already covered? Certain pharmaceutical industries spend not more than 6 per cent and the return, after all the expenses, is 20 to 25 per cent.

Shri L. S. Davar: As I have already said, everything which the pharmaceutical industry does is not covered by this; and the Government have got

sufficient power with them to control the price structure of the various commodities.

Dr. M. M. S. Siddhu: A surgeon, after a good deal of research, finds out a new method of surgery. As a physician cures with his medicine, this surgeon cures by this newly invented method. Will the hon. witness like the surgeon to get his method of operation patented?

Shri L. S. Davar: In that case every housewife who can cook a better meal can get a better patent.

Shri Peter Alvares: You have stated in your memorandum that an importer should be recognised as an inventor more or less and given the same rights. In the absence of any corresponding provision for the compulsory working of patent in India, don't you think that these two, when combined, would deprive the country of any benefit of any invention?

Shri L. S. Davar: With due apology, I think the hon. Member has not appreciated the particular provisions of the Act. When we talk of an importer, he is an importer not of a commodity. He is an importer of an invention. You go abroad and visit various countries to see various processes. You see how various articles are manufactured. Then you decide that something is good for our country. You bring it to this country and start working it. Are you not entitled to get a patent?

I can give you an example. In 1934 we used to import bangles from Czechoslovakia at a price of Rs. 2.50 per gross. One Mr. Mehta went to Japan and found out the process by which lustre bangles could be manufactured. He found out what the process was, came back to India and started working that process in his own factory. The result was that the price of those bangles came down to Rs. 1.25 per gross. Would he not be entitled to get protection for his wonderful choice of finding out something which will save foreign ex-

change and bring a new industry to the country? This is what I meant by importation of an invention.

An hon. Member: That is importing the know-how.

Shri L. S. Davar: Along with that you are importing know-how also. This is something which is beneficial for the country. We should continue that practice for a few years to come. As far as compulsory licensing is concerned, that provision is already there.

Shri Peter Alvares: In view of the fact that in the international field today developed nations are paying attention to the needs of the developing countries, is it not in the interest of India or any underdeveloped country for that matter to insist that the product should be worked out in India?

Shri L. S. Davar: I entirely agree with the hon. Member. There are two types of people who have got patents—one is the local people and the other foreigners.

Shri Peter Alvares: What I said applies to foreigners.

Shri L. S. Davar: When we talk of a foreigner, if you give him enough inducement to come and work in this country, why would he not do it? I can give you an example. Mexico which is a developing country is offering considerable advantages to the investors there is other countries and money is being spent in developing industries, by the developed countries, in Mexico. If we give enough impetus to the foreigners, they will come and do it.

Shri Dinen Bhattacharya: Yesterday you were telling us that patent is nothing today; what is important is technical know-how. Why then you are so much interested in opposing this Amendment Bill?

Shri L. S. Davar: This will take a long time to answer. In one sentence I can explain it in this way that the Patent acts as a legal vehicle for the transfer of technology. It gives a good

psychological feeling to a person who has got the know-how.

Shri P. S. Naskar: It is not an individual as you seem to say, but a company who gets the patent.

Shri Dinen Bhattacharya: You have said that the price has nothing to do with the patent. May I draw your attention to the furor created in our country about the import of librium which was sold at the rate of Rs. 5,000 a kg. Then, suddenly, a small firm of Delhi imported the same material from an Italian firm. That cost was Rs. 300 a kg. How did it happen? Has it got anything to do with the existing patent law which requires immediate amendment so as to remove these difficulties?

Shri L. S. Davar: The story of librium has travelled throughout the world. You cannot make a law on the basis of a particular instance. You must look into the overall picture. I have myself asked questions about librium. I have asked those people: Have you gone and explained to the Government why you are charging such high price? You cannot make a law on the basis of a particular instance. That is my answer.

Shri Dinen Bhattacharya: Is it not a fact that before the First World War, in America chemical industries were totally and fully dominated by German companies? America continued to get patent rights and built up their own chemical industries issuing licences to the American firms. Is it not time for India to follow the same example in respect of so many things which are still being imported by the monopolists from foreign countries?

Shri L. S. Davar: We did that during the War. All the patents belonging to Japan and Germany, the enemy countries, were being given freely to anybody who wanted.

Shri Dinen Bhattacharya: That was the starting point of the chemical industry in the USA. From that time it started developing.

Shri L. S. Davar: I think that again will need a long reply.

Mr. Chairman: Then, it is not necessary.

Shrimati Sharda Mukerjee: In your memorandum you have referred to Clauses 87 and 88 regarding the 'Licences of right' in respect of food and drugs and you have said that these two clauses in your opinion should be deleted because they will be a disincentive to foreign drug companies to come and work their patents here. You have also mentioned that where the process is very complicated then the provision of such a section in the Act will not in fact benefit the country because of lack of technological base or industrial base. I would like to know whether you would have any suggestions whereby instead of deleting these clauses the intention of these clauses can be safeguarded. Even Justice Iyengar has mentioned that Licences of Right should be included in view of the fact that in future there will be industrial development in this country and that we should not thereby block this possibility. Would you have any suggestions to make?

Shri L. S. Davar: I would suggest that just as in the U. K. the patentee should have the right to say, 'mark this as Licence of Right' and not the Government.

Shrimati Sharda Mukerjee: You, know that these drug companies are very powerful organisations. You have Rs. 6 crores; even then you cannot compete with the drug manufacturers of the USA and the U. K. So a small man will not be able to compete with them. What you suggest will provide blanket protection. Would you still say that the practice in England should be adopted in India?

Shri L. S. Davar: I think this is purely an economic question in the sense that, if there is a powerful group what will happen to others. There are so many powerful groups in this country or in any country for that matter. When we talk of laws, we should not

discriminate one person from another. Government have acted strongly in countries like America. You probably know what happened to Dupont. They were going to take over General Motors. The Government came into the picture under the powers of Anti-Trust Law and said that they cannot control so many companies. We are also proposing now to have Anti-Trust Laws. The Government have got enough measures to prevent the domination of powerful groups.

Shrimati Sharda Mukerjee: These groups are outside our country. How can we control them? Therefore, in this Bill it is proposed that there should be protection for all the newcomers. You are objecting to that by saying that Clauses 87 and 88 are to be deleted.

Shri L. S. Davar: As I submitted, you cannot fix royalty straightaway for every product.

Shrimati Sharda Mukerjee: Only with regard to food and drugs.

Shri L. S. Davar: There are drugs and drugs. You cannot say that for all the cloth sold in India there should be a particular profit or so much should be royalty. Each case must be considered on its merit. If there is more benefit to the community by a particular product, that should get more royalty. If there is less benefit to the community by a particular product, then that should get less royalty. I think that every businessman sets a balance when he is making a contract with the man who is giving the know-how or patent and the man who is receiving the benefit from it. I can tell you that all the businessmen are not fools. They will not pay much if they are not going to benefit much.

Shri M. R. Masani: I want to ask only one question to draw some more information out of the witness. The impression that has been given is that there is one way traffic between the rest of the world and India and

that India is at the receiving end of a raw deal. Can you, from your experience, tell us if this impression is correct? In our country also the trend towards inventiveness in the people is growing. Indians also have abundant inventive genius to make inventions just like people in more advanced countries. To what extent do you feel that this inventive trend has increased in our country and what benefits have we derived out of that?

Shri P. S. Naskar: In which field?

Shri M. R. Masani: In all fields.

Shri L. S. Davar: I don't bother about the quantity of inventions although the quantity is also increasing. The quality of our inventions is increasing to a very very large extent. Let us take, for example, the pharmaceutical industry. I cannot disclose the name unfortunately. But one of our American clients has paid probably 200,000 dollars for buying a process from this country because they felt that it was so good. I drafted the agreement for them. So we cannot say that there is no genius in this country and my submission is that we should encourage them in order to develop it further rather than strangle them.

Shri P. S. Naskar: Is that product not being sold at a very high cost?

Shri L. S. Davar: It has not yet started working. If the honourable Member is interested to know, that company is operating in this country.

Shri R. Ramanathan Chettiar: There is the following note in the Reserve Bank of India which has made a survey of the pharmaceutical industry on page 1389 of November 1964 issue.

Although the burden of foreign collaboration is perhaps most readily apparent in the form of payments for patents, knowhow and other ancillary services, the real effect of such collaboration has also to be evaluated in terms of the contribution of the transmitted technology and management

practices to the development of a particular industry and the long-run contribution that it makes to decreasing the country's dependence on imports and increasing its exports.

Do you find any trend towards this objective?

Shri L. S. Davar: I think it is a very sensible statement.

Shri R. Ramanathan Chettiar: Are these people to whom we have given the licence taking steps to meeting the desire expressed here?

Shri L. S. Davar: If overall conditions for foreign investment is improved in this country, you can see that a number of industrialists will come and invest in this country.

Shri R. Ramanathan Chettiar: It is one-way traffic now.

Shri L. S. Davar: When we reach a particular stage of development, then we are going to give the know-how to the other countries. That is the proposal which I had made to the United Nations. Look, we want knowhow from the developed countries and we are prepared to give knowhow that we develop because we are industrially better developed than many other countries; we can synthesize our genius with the knowhow of the foreign country and the process which we will develop will be more applicable to developing countries than the processes which have been developed by highly developed countries. Therefore, I said, 'you give us an opportunity to take the know-how from highly advanced countries and we will synthesize that with our practices and knowledge; we will develop our own processes which will be more applicable to other developing countries.' For instance, in America they would manufacture one million pieces of this microphone. We do not need one million of these microphones. To manufacture one million microphones they will adopt a particular process. But we may need only 10,000 and we shall adopt

another process. Therefore, we shall take their process, and see how it can be applied to the technical conditions of this country, and the moment we have developed that, we are prepared to give it to other countries, and I can assure you that other countries are looking forward to receiving the technical know-how from our country. That is what I gather from my contacts with people in the other international fields.

Shri R. Ramanathan Chettiar: How would you like the idea of the system prevalent in Switzerland to be adopted here? That system is that the patents are only for the process and not for the products. In Switzerland the drugs are free from being patented.

Shri L. S. Davar: We must consider the conditions of each country. In my opinion what is good for our country is that we should give protection, as I have said before, for the product covered by that particular process, which as I said, each country must consider according to its circumstances; each country must consider the laws according to its own convenience; what is good for us, in my opinion, should be the practice.

Shri R. Ramanathan Chettiar: Take the question of baby food. At present is not the manufacture of baby food the monopoly of only three firms? Is that monopoly not being perpetuated, if these patent rights were to continue like this?

Shri L. S. Davar: I do not know how baby food comes into the picture, because I have not seen a process for baby food being patented so far.

Shri R. Ramanathan Chettiar: It is hampering the development of our indigenous industry.

Shri L. S. Davar. So long as the clauses for compulsory licensing are there, any abuse of the patent system is very well covered by these clauses.

Shri R. Ramanathan Chettiar: Yesterday, in the course of your remarks, you had made an astonishing statement that startled some of us here.

when you said that the present Act was enough and there was no need for this Bill.....

Shri L. S. Davar: It is enough; I would repeat that statement.

Shri R. Ramanathan Chettiar: I am really surprised at this statement, and I believe some of my colleagues were also surprised when you made that statement. The present Act was based on the pattern of UK in 1911, that is, about fifty-five years ago. In the context of the fast changing economic development of our country and the other under-developed countries, *vis-a-vis* the developed countries, I am really surprised that you should think on those lines, even though you are an experienced person in this line.

Shri L. S. Davar: May I submit that this Act has been amended several times? Prior to one particular year which I cannot mention just now, we had a provision for revocation of a patent if it was not being worked in India. That clause was amended and we have now got the compulsory licence system. The Act was amended to provide for compulsory licence for food and medicine. As the requirements are coming up, we are entitled to amend our Act. But all that I am against is the wholesale revision of the law which no industry, as far as my information goes, has asked for.

Shri R. Ramanathan Chettiar: But in the same breath you also said that we should move with the times. So, do you not think that we should also streamline our legislation to suit the changing needs.

Shri L. S. Davar: The point is that if the legislation is such that it suits the requirements of the country at the present moment, then we should not disturb it. I have said already that during the Plan periods, when we want foreign investment and we want the local technological experience to develop and so on, we should not disturb the law; the law should remain as it is so that the foreigners as well as the local people can develop their industries in a proper manner.

Shri R. Ramanathan Chettiar: Even though it be of a reactionary nature? After all, we have adopted democratic socialism and we shall have to base our laws within the four corners of the policy of our country.

Shri L. S. Davar: Yes, but my submission is that our present law is much stricter than other laws; our present Bill is completely different from what appears in the socialistic countries.

Shri R. Ramanathan Chettiar: It is in consonance with the policy.

Shri L. S. Davar: No; it is not so in socialistic countries. In Russia you are entitled to get a patent and the Government will not allow importation from another source in violation of the rights of the patent-holder.

Shri R. Ramanathan Chettiar: While answering a question of a colleague of mine earlier, you said that you were not quite sure whether an industry could come to fruition within a period of ten years, and you, therefore, wanted a longer period. But from the figures of investment and the return thereon, you will find that on an investment of Rs. 14 crores, a return of Rs. 7 crores was there; in 1962-63 the people concerned got a return of Rs. 2 crores by way of remittances of dividends, and Rs. 5 crores by way of royalties, which means a return of nearly 50 per cent. I do not think that in any other country, the pharmaceutical industry gives a return of 50 per cent. This is due to the patent laws being so elastic in our country.

Shri L. S. Davar: No, I do not agree with the hon. Member.

Shri R. Ramanathan Chettiar: I think Shri P. S. Naskar will bear me out on this point.

Shri L. S. Davar: I am sorry to repeat that when we talk of a royalty of Rs. 5 crores, we are talking of things which have already been developed, and when I say that the period

of protection should be extended, I am taking into consideration the period for the development of the inventions into a practical shape. Surely, it is not the pharmaceutical industry only but perhaps there are several industries which give so much profit, but considering that they do make profit, you must see that you have got the accumulated know-how of people who have worked perhaps for five years before or ten years before and who have come and given you the know-how now, and who are making profits now.

Shri R. Ramanathan Chettiar: But does it not tend to a monopolistic pattern?

Shri L. S. Davar: Again, unfortunately, I would submit when you talk of monopolistic pattern, that we have got other provisions of law in order to overcome that.

Shri R. Ramanathan Chettiar: Even the Monopolies Inquiry Commission has referred to that.

Shri L. S. Davar: Even under the present Act there is monopoly but I would say that the monopoly is mostly in the technical know-how; in so far as patents are concerned, the existing provisions are sufficient to break that monopoly completely.

Shri R. Ramanathan Chettiar: Therefore, we should tighten the law now.

Shri L. S. Davar: How much more can we tighten the law? The more you tighten the law, the less the people will be inclined to give you the know-how.

Shri R. Ramanathan Chettiar: Should the period not be made less than ten years?

Shri L. S. Davar: No; I am afraid it is going to hit back the Indian industry itself.

Shri Balkrishna Wasnik: Does the witness agree that there is misuse of patents which this Bill is trying to

prohibit? Supposing this Bill is not passed, then what method would he suggest to prohibit this kind of misuse?

Shri L. S. Davar: There has been no misuse. If there has been any abuse, the provisions are already there and if the people are not enlightened enough to take advantage of the provisions it is not the fault of the Act.

Shri A. T. Sarma: May I know whether you are supporting this Bill or opposing it? After going through your memorandum I was under the impression that you are opposed to this Bill, but yesterday you supported the Bill. I want to know whether you stick to what you have stated in your memorandum or you are sticking to the oral evidence that you gave yesterday?

Shri L. S. Davar: I do not think there is any conflict between the submissions I made yesterday and the statement I have given in writing.

Shri A. T. Sarma: The Government has stated that the existing Act has not achieved its purpose. You say there is an improvement in the quality of the patents though the number is less. It is an ambiguous term. What is the improvement in quality? You have stated in the memorandum that in certain cases the rights of the patentees have been curtailed. You have listed many objections. But yesterday you said that the licensing system is necessary, whereas in your statement you say that it has totally proved a failure in the advanced countries. You now say that the existing Bill provides a better procedure of examination and it has been done on the model of advanced countries. Again, you threaten that if the proposals are implemented then the expenditure will go up five times and you ask whether the Government is prepared to bear such a huge expenditure. From the grounds stated by you it seems you are opposed to the Bill. Do you agree with that?

Mr. Chairman: Take it by what it is. He stands by his statement and also his oral evidence.

Shri P. K. Kumaran: Mr. Davar, you are very clearly in favour of the continuance of the present Act and not in favour of the proposed Bill. The main difference between the present Act and the proposed Bill is that as far as drugs and other things are concerned the process is going to be patented and not the product. You seem to think that the process cannot be separated from the product. If the present Bill becomes an Act and the processes are only patented, what do you think will be the impact of such a patent system on the manufacture and sale of drugs and other things in India.

Shri L. S. Davar: I do not agree with the first observation which the hon. Member has made, that I am absolutely against the Bill or the only improvement or the only amendment in the Act is in relation to drugs. It is a wholesale revision of the present Act, and I have in my memorandum detailed only such criticism of such clauses which have a certain impact either on the existing industry and development of further industries or on the inventor, and I think it would take a long time if I go through all those things again. My memorandum is already in the hands of hon. Members. With regard to the point about the process and the product, the answer is very simple. If you give protection for the product covered by a process, then it will give impetus or inducement to others to find out alternative processes. I have already elaborated that point.

Shri P. C. Borooah: In regard to the terms of existing patents it seems you are opposed to the entire concept of reduction irrespective of the merits of each case on the ground that it would be unconstitutional and it will violate the existing agreements. What will be your opinion if it is done in the case of an emergency in the country?

Shri L. S. Davar: In the case of emergency it is all right. We are not in any state of emergency. This law is being made for posterity. When once the Government has given a right, why should it take away that right? Many people have made agreements on the basis of those rights and made investments on the basis of those rights. The legislature should not take away those rights merely by passing a law.

Shri P. C. Borooah: If it is done in the public interest, for the purpose of defence or....

Shri L. S. Davar: Under the Defence of India Rules you can do anything, but do not make that as part of the statute.

Shri B. K. Das: Shri Davar is of the opinion that 4 per cent maximum royalty is insufficient. May we have an idea as to what according to him should be the maximum royalty?

Shri L. S. Davar: It all depends upon each individual case. I have given an example where in one particular instance our Government allowed 15 per cent royalty on a non-exclusive basis because the art was such that even if we paid 15 per cent royalty we were benefiting by it. Each case depends upon its own merit. Therefore, as I said, royalty should not be fixed, it should depend upon the benefit that a person or an industry is deriving from the patent or know-how.

Shri B. K. Das: Do you mean to say that the Central Government should judge that maximum limit?

Shri L. S. Davar: Of course, all agreements are screened by the Government because it involves payment of foreign exchange. They have the right to refuse any agreement being executed if they find that the royalty is too much. Why should the Act lay down the limit?

Shri Babubhai M. Chinal: May I know from the witness whether he subscribes to the view that there should be a good flexible patent law under which industries can develop just like Japan which even today is paying nearly 100 million dollars by way of royalties to other countries but it is set off against the increased trade and its cost of production by making use of the know-how which has been given by others, even though they had to pay very high patent charges? Is it possible that under these circumstances you would advocate that this country should also adopt a little less restricted patent law so that they will be able to take advantage of it since this country is also under-developed and requires more know-how than many other under-developed countries? If so, does he subscribe to this view also that in the ultimate analysis even though you pay more royalties you are actually benefited by way of your export trade increasing by leaps and bounds?

Shri L. S. Davar: I entirely endorse the view of the hon. Member. That is why I quoted the example of Japan which has paid 300 million dollars as royalties within the period of five years and is benefited to a great extent.

Shri P. S. Naskar: You said that you are in favour of the patent of the process and not the product.

Shri L. S. Davar: Yes, not the product *per se*. It should be made clear in the clause that the patent is for the product made according to the process.

Shri P. S. Naskar: The clause says:

"...no patent shall be granted in respect of claims for the substances themselves, but claims for the methods or processes of manufacture shall be patentable."

Shri L. S. Davar: What about the product made by that process? The process of manufacture of penicillin

consists of this, this and this. Then the final claim will be penicillin manufactured by the processes aforesaid. So long as protection is given to that process...

Shri P. S. Naskar: Kindly read clause 47(1)(b) which says:

"Where a patent is for a process of manufacturing an article or substance, the exclusive right by himself, his agents or licensees to use or exercise the process in India and of using or selling in India articles or substances made by such process and of authorising others so to do."

Shri L. S. Davar: I have read that clause. The wording of clause 5 should be made clear to make it in conformity with clause 47. On the one hand, you do not clearly say that the product made according to the processes will be given protection. On the other hand, in clause 47 you say about substances manufactured by the process. Therefore, clause 5 should be amended in order to make it specific that the product made by that particular process will be given protection.

Shri P. S. Naskar: Do you agree with me when I say that there should be one process for one product and not a multiplication of processes?

Shri L. S. Davar: I am afraid, it is not a practical way of thinking. I will tell you something from my own experience. Let us take an ordinary composition which results in a particular product. Let us take a refractory material which consists of a particular composition—alumina 5 to 10 per cent, chromium oxide 2 to 3 per cent and so on. When we talk of one process, according to the existing law or according to the modified Bill, it is always one process which is covered. But there is a general process in which there is variation.

Shri P. S. Naskar: Drug is a composition of intermediates. Each

intermediate will have its own process. Do you think that all these individual processes should be allowed to be patented or only the final process should be allowed to be patented?

Shri L. S. Davar: It depends upon particular inventions. One could not generalise. I would put it this way. If there are certain variants coming within the broad aspect of the whole invention, then you give claim for the broad aspect of the invention, including the details of that process.

Dr. C. B. Singh: There is a statement which reads:

"So drastic are the terms now proposed that there seems little doubt that India, if she should so desire at any time in the future, would not be able to become a member of the International Convention if the Bill in its present form is passed."

Would you like to make any comments on this?

Shri L. S. Davar: There is an International Convention of which 70 countries are members. Certain principles are laid down which have to be followed by each member country. One of such principles is that so far as the patent law is concerned, the same treatment should be given to both the nationals and foreigners. This has been agreed to by all the member countries of the Convention, including Russia. Now if we adopt certain discriminatory clauses in our law, we cannot join that convention.

Mr. Chairman: Thank you for your evidence.

Shri L. S. Davar: Sir, may I thank you and the members of the Joint Committee for giving me an opportunity to express my viewpoint?

(The witness then withdrew)

II. Remfry & Son,

Patent and Trade Marks Attorneys,
Calcutta.

Spokesmen:

1. Mr. Harold Holloway.
2. Shri Desh Pal Ahuja.
3. Shri Baldev Chaturbhuj Ojha.

(The witnesses were called in and they took their seats).

Mr. Chairman: Mr. Holloway, the evidence that you give will be treated as public. It will be printed and distributed to all the Members and also placed on the Table of the House. Even if you want any portion of it to be treated as confidential, it will be distributed to our Members.

We have received your Memorandum and we have distributed it to all our Members. If you want to add anything in addition to what you have said in that Memorandum, you may do so and then our Members will put questions and you may answer them.

Mr. Harold Holloway: I thank you, Mr. Chairman and the Members of the Committee, for giving us this opportunity of expressing our views on this subject. We are here to help the Committee. I hope you must have seen our written Memorandum and you will appreciate that we have aimed in our comments to provide material that may help in pinpointing difficulties and showing what improvements can be made.

My two colleagues and myself have between us some 50 years of experience and participation in work relating to industrial property. I have spent more than half of my life in India, much of it in connection with this work. My colleague, Mr. Ahuja, has spent many years in dealing with industrial property matters. He is a Master of Science and he had himself been engaged in research for several years with the Government of India. Mr. Ojha is a Barrister-at-Law. He has also been the Registrar of a High Court, a Deputy Registrar of Trade

Marks, and a Registrar of Joint Stock Companies. So, we have some experience of the matters which you, Sir, and the Members of your Committee are considering.

We felt that we had something to contribute in helping you to decide what form the new legislation should take. It is only right, I think, to say that, in general, many people may have overlooked the fact that there has really been no recent inquiry into this. In 1948, the Tek Chand Committee was set up. That Committee did circulate a very detailed questionnaire to which my firm, amongst others, also replied. That covered the whole range of patents law. The Committee which consisted of a number of persons presided over by the distinguished ex-Judge examined 122 witnesses. Its members visited 13 different cities. There was, therefore, a very thorough inquiry. The Committee was appointed on the 1st October, 1948 and it reported in April, 1950. Now, the main point that I would submit here is that it was set up very shortly after India had her Independence and shortly after India began seriously to tread the path of industrialisation.

Then, when the Ayyangar Commission was appointed in 1957, it was not in the same way as the Tek Chand Committee was.

Shri R. Ramanathan Chettiar: In what way?

Mr. Harold Holloway: I have got the exact language here. The learned judge was asked to advise with regard to the provision of law relating to patents and designs. He did not examine any witnesses other than three Government or semi-Government officials. The questionnaires were sent out and 79 replies were received. But those questionnaires—I have got the copies of them—related only to the question of product patents concerning chemicals and foodstuffs and compulsory licensing. The Tek Chand Committee covered all the points. Certainly, I think, all of you will agree with me in paying a tri-

bute to the learned Justice Ayyangar for the wonderful appraisal he carried out. But the important point is that it was a personal appraisal. His appraisal did not rest upon a comprehensive study of evidence as was taken by the Tek Chand Committee.

Mr. Chairman: You want the whole ground to be gone over again by another Committee?

Mr. Harold Holloway: I leave it to this august Committee. I am only making a point which, I think, is relevant to the background of this Bill.

You have got our Memorandum. On p. 5, you will find we have listed many points. There are 23 main points set out there. It is interesting to note that each one of those 23 points rests not upon the Tek Chand Committee's recommendations but on the Ayyangar Commission's recommendations with the exception of 3 points which have been added since the Ayyangar Commission's Report.

I think there were certain practical considerations which came before the Tek Chand Committee—no doubt, they would be regarded by you as relevant—which perhaps were not brought before the Ayyangar Commission because evidence was not invited. The questionnaires also were limited only to the two aspects of compulsory licensing and product patents. If you look at the 23 points which have been enumerated, you will find that those rest upon the recommendations of the Ayyangar Commission with the exception of 3 points which have been added since the Ayyangar Commission's Report. They are not based upon a wide-ranging of inquiry of the kind which was undertaken before. There has been no evidence taken since 1949-50 with the exception of those questionnaires relating to the only two aspects of compulsory licensing and product patents. That much is clear. We should be specific concerning the particular clauses. We cannot avoid feeling that the main predicament, relates to the criterion to be applied to the particular clauses. I have in

mind particularly the lines at the bottom of page 4. I would like to read out these few lines. It says:

"The obvious principal criticism which can be made against the Bill is that it neither ends Patent Law nor gives adequate protection to inventors. Patent Law everywhere rests upon the premise that in the case of inventions some element of monopoly, although subject to suitable safeguards, is in the public interest. If this were not so, then there would be no place for Patent Law."

This is the basic predicament, which is reflected throughout the clauses of the Bill.

In our submission there cannot be any patent system, unless it is attractive or sufficiently attractive to inventors. I would like to refer to the Tek Chand Committee Report. They Reported in page 71 as follows:

"Another suggestion is that the provisions in regard to the granting of compulsory licences should be made applicable at least to patents for inventions relating to food, medicine and surgical appliances. We have given careful consideration to the arguments advanced for and against these suggestions. As regards the first suggestion, we are wholly opposed to it. The 'exclusive right' conferred by a patent is the essence of the Patent system and compulsory licences are a negation of such 'exclusive right'. A patent which is liable to be restricted by the granting of compulsory licences would confer 'exclusive right' neither on the patentee nor the licensee. Most of those who take out patents do so with a view to enjoying the 'exclusive right' conferred thereunder, and the system of granting compulsory licences in respect of patents generally would not be attractive to them."

This is what they said. The point I wish to make is this. We are all compulsorily amenable to the taxation laws, income-tax laws and things of that sort. Regarding patent laws, the question is whether a patentee considers it to be worthwhile endeavouring to make an invention, and, if he does make an invention, his decision whether to secure a patent is his own personal choice which can certainly be affected very considerably by the legislation in any particular country. That view is reflected in the Ayyangar Committee report. It is said on page 19 as follows:

"Patent Laws rest upon the assumption that it is desirable to encourage inventions for their own sake and that monopoly privilege is the best way of doing it. The Swan Committee observed:

"...The theory upon which the patent system is based is that the opportunity of acquiring exclusive rights in an invention stimulates technical progress in four ways: first, that it encourages research and inventions; second, that it induces an inventor to disclose his discoveries instead of keeping them as a trade secret; third, that it offers a reward for the expenses of developing inventions to the stage at which they are commercially practicable; and fourth, that it provides an inducement to invest capital in new lines of production which might not appear profitable if many competing producers embarked on them simultaneously. Manufacturers would not be prepared to develop and produce important machinery if others could get the results of their work with impunity."

Looking into the individual clauses of the Bill, the balance is so very heavily weighted against inventors. If one looks at the additional liabilities which we enumerated in the introductory chapter, the cumulative burden on an inventor is very heavy.

Under clause 102 Government is entitled in certain cases, to acquire patents. The "Notes on Clauses" against clause 102 read: "It will be useful to enable the Central Government to acquire an invention in certain circumstances, as for example, where it would be economical to acquire the patent instead of obtaining compulsory licences in respect thereof". I will cite an invention which is a worldwide invention, namely, "Terylene", covering synthetic fibres. If there were no patent in India then under the new Bill, by virtue of prior publication overseas no one else would be entitled to secure such a patent in India, and the inventor but he could not then be prevented from manufacturing as could happen if he had a patent, and it was acquired. If he secures a patent, it would become liable to be acquired by Government. He could then not use his own invention without first becoming a licensee or he would be an infringer. This is not all: under Clause 93. The Controller possesses considerable powers to deprive altogether such a patentee of his rights. The patents also acquire an obligation to give a great deal of commercial information to the Controller under penalty of fines. All these are factors which cumulatively must influence the inventor in deciding whether it is worth his while to secure such protection. A little earlier I did mention the question of the time lag. One of the aspects that has naturally been given much attention in the drafting of this Bill has been the effect of foreign-owned patents. During the public controversy which preceded the introduction of this Bill, there was much reference to the majority of patents being owned by foreigners, although that applies to many other countries also.

In this connection, I would like to draw your attention to page 13 of the Ayyangar Report where there is a list of the percentage of patents in different countries which are foreign-owned. This relates to the years 1930-37. At that time, it is known that the potteen of production and manu-

facture throughout the world was very different from what it is today. If the Members look at these figures, they will see that they are very much out-of-date today. As a matter of fact, a majority of patents are owned by foreigners. This is so in almost every country, because protection is usually secured for a good invention in a large number of countries, and in only one of them the inventor is not a foreigner.

This need to consider the international position is particularly important, because, while in every country the legislators can decide the laws in their own country, nowadays when patented goods are extensively exchanged in the ordinary course of international trade there is really only a very limited variation in patent laws, as between different countries which is feasible. Otherwise one would have to face a situation in which goods, which were not covered by patents in India, had been manufactured here, and when they came to be exported. Inevitably, the inventor who had been unable to obtain a patent, or who had not considered it worthwhile to obtain one in India, would hold patent rights in other countries where the import of such goods from India would constitute infringement. This would inevitably be detrimental to the production of those goods here in India. These are practical considerations which, I believe, would have emerged, could there have been an inquiry in 1964 as well as in 1950. It is regrettable that there was no Inquiry Committee before introduction of this Bill. It is a matter of cumulative experience. In considering the position, it is not only right to look at the individual clauses of the Bill, but also at the overall impact of the Bill. Half of our anxiety—I do not say objections, because we are not in a position to object—concerns its cumulative effect.

We have set out these 23 points here. We believe that these are very relevant. Taken together they have

destroyed, or are likely to destroy, the balance of advantage. Unless there is an element of monopoly in the patent law, there is a contradiction in terms. Patent law does depend upon this.

It is being suggested in some quarters that the Bill which is now under consideration merely brings up to date the Tek Chand Committee's recommendations which found place in the 1953 Bill. But this is not really so. None of those 23 points appears in that particular Bill. They have all been added subsequently. Perhaps we are a little biased, but those who have spent a good number of years working with the Patent Office here have full admiration for its wonderful performance, not within the last two years, but really ever since Independence. They have been handling a number of increasingly complicated applications rising from 800 to 6,000 per year. We are full of admiration for them. We know from our contacts with overseas inventors that they too are appreciative. They also have great appreciation for the way in which our Courts of Law work. I was concerned here in Delhi in negotiations involving Government with the President of an American Company, who took the opportunity to visit the Supreme Court. He told me that it should be a compulsory visit for every foreign visitor, since it gave him so much confidence in India. This feeling has greatly encouraged foreign investors. They know that India cannot compete in the matter of financial return with such countries as South America. You may sometimes get a return on capital thereof 30 or 40 per cent in the first years. One of the main attractions here to overseas investors is the way in which the Patent Office functions, the way in which the Trade Mark Registry works, and the way in which industrial property rights are respected. These are things which are built only by years of hard work. Overseas investors greatly appreciate and admire the integrity and competence of our courts.

It is of particular regret to us and to them that whereas the Tek Chand Committee proposed that all appeals should lie to the Courts, this new Bill proposes that there should be no appeals to the courts in the matter of compulsory licensing, acquisition of patents by Government, etc. It is worthy of note that even at that time in 1950, when it was not intended that any such additional rights, as are now sought to be secured by Government, should be given to the latter, the Committee recommended that there should be appeals to the courts. As today Government's position is intended to be one of particular advantage, it is absolutely necessary that there should be a right of appeal to the courts. There are good grounds for this. I think I can illustrate this point by mentioning the matter of applications for extensions of the terms of patent. Now, in the new Bill, it is proposed that there should be no right to apply for extension of the terms of patents. Under the existing Act, there is a right to apply for an extension and there is discretion on the part of the Central Government to grant such extensions.

When the Central Government look at a particular Section of the Act, it is inevitable that its interpretation will be different from that of the courts because Government are bound to be influenced by considerations of policy. The Courts are not concerned with matters of policy. We are not saying that the Sections of the Act should remain permanently static. If the Legislature wishes to make any change, then we believe that the right way to do this is by amending the sections openly rather than by interpreting them differently. On the basis of the Tek Chand Committee's recommendation, there was provision in the 1953 Bill for the grant of extensions of the term of patents in certain cases. The Ayyangar Commission was opposed to this, and recommended that there should be no provision for extension, accordingly such provision was dropped altogether. During the period 1954 to 1957, 12 applications for exten-

sions of the terms of patents were filed, of which one was later abandoned. 5 applications out of the remaining 11 were granted. This was the position upto the time of the Ayyangar Commission. With the change of view that the Ayyangar Report produced, between 1958 and 1965 there have been 48 such applications, and not one has been allowed. You will see that whereas formerly almost 50 per cent of such applications were allowed, since the time of the Ayyangar Commission, every application, although based on exactly the same section, has been rejected, no doubt on account of such change in attitude. Probably the officials of the Central Government in this Branch are convinced of their fairness, but we have no doubt that considerations of policy have influenced them in the interpretation of these sections. If it was decided that there should be no extensions in any case, the right course for the legislature is to alter the section rather than to alter the manner in which it is applied. Having regard to the fact that the life of patents is short, the right to grant extensions in suitable circumstances as recommended by the Tek Chand Committee should be retained. India needs many of these inventions. Some inventions, by their very nature, require long periods of testing before there can be any exploitation of them. Amongst the 48 applications rejected, one application related to a certain insecticide. As you are all aware, certain insecticides require long testing before it can be known with certainty that no toxic residues will be left in crops, edible or otherwise, which have been so treated. Here, the question of human safety is involved. Approval was not given to utilise this invention anywhere till 1956, though the date of the patent in India was some time in 1948. Although such permission was given to use the invention only in 1956 in the USA, tests had taken place in India as early as 1957. This invention would be of great benefit to the cultivators of India. As I have stated earlier, it can take some time before such an invention,

having regard to the public interest, can safely be exploited. If all opportunity to secure extension of term of such patents is denied, the country will stand to lose much benefit, as these inventions will not be adopted to Indian conditions or commercially exploited here.

In all these circumstances inventors, whether Indians or overseas people, do believe that the sections of the Act which affect their rights should be amenable to challenge on appeal to the Courts. If there is an apprehension of delay in the making of these references to the court, then a special Patents Appeal Tribunal consisting of a High Court Judge should be appointed, so that such matters can be dealt with speedily. If this is not done, then Government's position will be one of undue advantage. There is a basic principle, which I don't think anyone of us would dispute, memo index in causa saus that is to say, "no one should be judge in his own cause". If there is fear as to delay, then it should be possible for Government to cope with this difficulty without taking away the right of reference to the Courts, which latter inspire so much confidence in those not only in this country but also outside. This right is being taken away particularly with regard to compulsory licensing. One of the proposals in the Bill is that the Central Government as the appellate authority will have the final say with regard to compulsory licences, while in certain cases the Controller, under Sub-clause 85 (iii), must even concern himself with whether the applicant will be permitted to manufacture once a compulsory licence was granted to him. In ordinary course, the Central Government will have been concerned with the matter of issue of any industrial licence, in which the applicant who proposes to manufacture, will have been involved but not the patentee. It is desirable that justice should not only be done,

but that it should appear to be done, and yet the patentee may later be in conflict with the holder of the industrial licence granted by Government, the outcome of which dispute will depend on an appeal to the Central Government, which had itself already granted the industrial licence. We have been concerned in cases relating to compulsory licences in which the applicants have previously managed to secure industrial licences from Government, and have thereafter sought to weight the controller's consideration of the compulsory licence application against the patentee. Thus, these are genuine apprehensions, and the Committee upon consideration of these representations may feel that a right of reference to the Courts is desirable. I cannot carry this point any further. I believe that if it is felt that the present situation is unsatisfactory from the standpoint of delay, then it would be reasonable to request this Committee to have a further look at the idea of creation of a Patent Appellate Tribunal as it might prove successful. It is not fair that delays of great magnitude should have been attributed to patentees during previous public discussions nor is it enough to say, in order to justify the proposed change, that appeals to the Central Government would be disposed of quickly. I would like to give you certain facts very briefly of one of the main cases in which delay is alleged. My firm has been engaged on the side of the patentees in practically all these compulsory licence applications, so that, we have comprehensive knowledge of these. A little while ago a paper was submitted to a meeting in India, concerning industrial property rights, in which allegations of delay by patents in compulsory licence proceedings were made. In the latter connection, one case is most commonly mentioned and will no doubt be referred to this Committee. In this particular case we would like to cite the broad facts as they are revealing. With your permission I would like to read these particulars.

Patent Nos. 43678 and 43679.

"The responsibility for delay cannot be attributed to the patentees.

After filing their applications on the 28th September, 1956, it took the applicants for reasons best known to them, until the 24th September, 1957, i.e., approximately a year, before true copies i.e., exact copies, were served on the patentees.

"Moreover, as late as the 2nd September, 1958, and the 30th October, 1958, i.e., two years and a month after the filing of these applications, the applicants lodged Petitions for leave to submit further evidence, both of which were dismissed by the Controller on the 20th January, 1959. It is surely inarguable that this delay is attributable to the applicants, and was not due either to the patentees or to any statutory deficiency.

"On the 9th February, 1959, the applicants made a further attempt, by lodging another Petition, to obtain leave to file additional evidence, and this was eventually allowed on the 30th June, 1959, whereafter, as is customary, the petitioners were, as a direct consequence, afforded opportunity to file additional evidence in reply, which they did on the 2nd November, 1959. In the result, the hearing of the applications was therefore able only to commence on the 22nd February, 1960.

"Thus, the applicants' own dilatoriness, in the matter of submission of evidence, was alone responsible for delaying the hearing during such period extending from the 2nd September, 1958, to the 22nd February, 1960, i.e., for almost 18 months.

"If to such period of 18 months there be added the period of one year, i.e., from the 28th September, 1956, to the 24th September, 1957, taken by the applicants to supply to the patentees true copies of their application, it is found that an aggregate of 2:

years and 6 months' delay resulted solely from the applicants' own actions.

"The hearing of such applications took place on the 22nd, 23rd and 24th February, 1960, whereafter the then Controller delivered Judgment only on the 21st March, 1961, i.e., 13 months later.

"If to such 13 months be added the period of delay directly attributable to the applicants of 2 years and 6 months, a combined total of 3 years 7 months delay in obtained for which, by no strength of imagination, could any lacuna or fault in the Patent Act or Rules (or indeed on the part of the patentees,) be held responsible.

"Accordingly, at the time of delivery of such judgment on the 21st March, 1961, a period of 4 years and 6 months had elapsed since the first filing of the applications."

Here I should say that if the combined total period of 3 years and 7 months delay is deducted, it will leave only 11 months with which the patentee is at all concerned. A brief reference may also be made to other cases allegedly, indicating dilatory tactics on the part of patentees. Suffice it to say that the facts are broadly similar in the case of the compulsory licence application relative to Patent No. 48416, in which delivery of the Decisions and Orders occupied more than 2 years and one month. I would respectfully request you to enquire into any such the cases which may be mentioned to you the facts of which should not be taken as established. Of course occasional advantage is taken of the rules by every part or litigant. This mention of delays is just to show that these one-sided allegations are without justification. I believe that the information in such statement will prove, therefore, to be interesting.

Shri M. R. Masani: Will that statement be available to us?

Mr. Harold Holloway: With the Chairman's permission I would like to make that statement available to the

Members. I believe I need give only the numbers of the patents concerned. On that basis verification from the Patent Office could be made.

Shri M. R. Masani: Would you kindly circulate that statement?

Mr. Harold Holloway: I shall have it cyclostyled tomorrow morning, so that it can be distributed tomorrow. I have not mentioned the names of the parties but I shall give the patent numbers.

Mr. Chairman: Here the case number is enough.

Shri R. P. Sinha: It seems that the witness has very long experience. Can you tell us as to whether there are any cases where the patentholders were also responsible for such long delays? I think invariably in almost all the cases, the patentholders prolong such litigations.

Mr. Harold Holloway: I could not concede on that point. I would only say that all patentholders are not saints. Certain procedural advantages can sometimes be taken by them. There have also been a number of cases where delays have been caused by the Applicants. But, where the patentee is allegedly at fault there may have been valid reasons for opposing the applications.

In the well-known case relating to chloram-phenicol the international patentee had six licensees, including its own associated company in India, who were licensed to produce chloram-phenicol in India. Three of them, prior to the submission of the application for a compulsory licence, had already obtained industrial licences to produce, and the total of such licensed production capacity exceeded Government's estimate of requirements for Chloram-phenicol. Of these six companies who were licensed, five were competitors of the patentee. They had no connection whatsoever with the latter. The other company was a subsidiary of the Patents. In so far as the applicant was concerned it is a fact that, the applicant had itself been associated with a licence of the patentee. That connection

had been terminated and the patentees rightly or wrongly, but genuinely considered that the applicants were not suitable. It cannot be said to be an unreasonable monopoly when a patentee has licensed five of its competitors.

Accordingly, as I said, we hope that the Committee will reconsider the question of appeals.

Now so far as the Bill itself is concerned, it does seem to us to contain a number of oddities. For want of a better word, I call them, 'oddities' and by that we have particularly in mind those clauses which provide for retrospective effect.

Now, it is never enough to say that in no circumstances should there even be retrospective provisions, but, generally speaking, there should always be close examination before introduction of any retrospective provision,—and there are six main clauses which affect the position of patentees adversely and retrospectively.

The first one concerns the term of patents which is clause 53. We have made our comments on this on page 54. I do not propose to add anything to that.

Shri P. S. Naskar: Mr. Holloway is just elaborating the points that he has given in his memorandum. But is he prepared to answer questions on the basis of the written memorandum he has submitted. He is only just recapitulating what he has said in this memorandum. I think we have all gone through his memorandum. If he has any new points, he can put forward them rather than elaborating his memorandum.

Mr. Chairman : You can go on.

Mr. Harold Holloway: You will appreciate this is a very long and important Bill, sometimes it is very difficult to recall precisely whether one has included a point or not. I do not want to recapitulate. I apologise.

Shri P. S. Naskar: You can supplement it.

Mr. Harold Holloway: I want to add one or two points of information.

Cl. 64(1) (h):—We believe that this may even not have been intended, but it does seem rather less than equitable that a patent granted on the basis of the law as it existed at a particular time, and which complied with such law, should become liable to be revoked as a result of a subsequent change. We have in mind, particularly, the question of novelty as it is proposed to be affected by prior publication outside India. We also have in mind the position of importers who have already secured patents, and there is nothing wrong in that. Many countries do refuse to grant patents to people who, having seen inventions overseas, have brought them into the country and then manufactured under them. But, if the legislature changes its mind on the question of communication patents or the obtaining of patents by importers, then we say that it is undesirable that these changes should be made retrospectively effective. Drafting of clauses of such technicality is always difficult and any criticisms that we have made, have been made with humility. It is easy to throw stones. It is a highly difficult Bill to draft and anybody who has attempted to do so would, we hope, welcome comments which are based on practical experience. It does seem in this case that the draftsmen may perhaps have overlooked the consequences of the new revocation grounds, which have been specified elsewhere in the Bill, upon patents which will have been granted before the Bill becomes law. For example, take the matter of destruction of novelty, anticipation as it is called by prior publication overseas, i.e. anywhere outside India, as opposed to only inside India—it may be that this Committee will feel that it is a right step that publication anywhere should destroy novelty, but that is a separate question. The point here is, whether any person should be able to go to a Court to apply for revocation of a patent, granted before the new Act, only on the ground that some 8-9

years ago there had been some publication overseas prior to the grant of the particular patent in India. That could only lead to great uncertainty. My respectful submission is that consideration should be given to remedying this defect.

The third point concerns Cl. 68: Interests are not to be valid unless registered within 3 months. This is likely to lead to difficulties in the case of agreements that have previously been executed. One would prefer to ensure that this should apply only to agreements executed after the coming into force of the Act. Fourthly, under clause 107, in an infringement suit, every ground on which a patent may be revoked is to be a ground of defence. This would mean that after infringing your patent, I could go along and say to the Court that although your patent had been valid for say nine years, it had now become liable to revocation by virtue of this new Act, since there had been publication, possibly even by yourself, the patentee outside India, at some time prior to the filing of the Indian application . . .

Mr. Chairman: How do you say clause 68 is retrospective?

Mr. Harold Holloway: It is retrospective because it requires all agreements, even previously concluded agreements . . .

Mr. Chairman: The agreements are only with regard to those registered under the present Act and not with regard to those registered under the previous law.

Mr. Harold Holloway: With respect, all patents, even if they were secured under the earlier Act would surely be regardable as having been granted validly and held on the register under the new Act. If that is not so, then it is difficult to know what the status of those "old" patents would be.

Shri M. R. Shervani: Then what is the position of the patents which are already existing?

Draftsman: Sir, wherever we have applied the provisions of the present law to the patents issued under the existing law, we have specifically said so. But wherever we have not specifically said so, the patents granted under the existing law will be subjected to the provision of clause 162 be governed by that Act and not by this law.

Shri M. R. Masani: You mean the old law will continue for the old patents?

Draftsman: So far as this point is concerned, kindly refer to the repeal clause, clause 162. It says "(2) Notwithstanding the repeal of the Indian Patents and Designs Act, 1911, in so far as it relates to the patents, the provisions of section 21(a) of that Act and of any rules made thereunder shall continue to apply in relation to any patent granted before the commencement of this Act in pursuance of that section. (3) Save as otherwise provided in sub-section (2), the provisions of this Act shall apply to any application for a patent pending at the commencement of this Act and to any proceedings consequent thereon and to any patent granted in pursuance thereof." Wherever there is an application pending, to that, of course, this law will apply.

Mr. Harold Holloway: But clause 64(1) which relates to revocation reads: "Subject to the provisions contained in this Act, a patent, whether granted before or after the commencement of this Act may, on the petition of any person interested or of the Central Government, be revoked by the High Court on any of the following grounds . . .

Draftsman: That is retrospective. Wherever we have provided retrospective effect, we have said so. Clause 53(2) also has retrospective effect.

Mr. Harold Holloway: The fifth is Clause 141 relating to determination of certain contracts . . .

Draftsman: That is retrospective; that is made clear.

Mr. Harold Holloway: Then the sixth one is Clause 87—that patents already granted are to be endorsed at once with the words "Licences of right . . ."

Draftsman: That is also retrospective.

Mr. Chairman: Wherever it is retrospective, it is mentioned in the section itself.

Mr. Harold Holloway: In these cases, there is no doubt that it is retrospective and that is an aspect which is causing considerable concern, understandably, to patentees. These are the six anxieties concerning the retrospective consequences to patentees. Then there are some clauses which do seem to us to be inappropriate. I have here seven of those clauses. I am not going to make again all the comments which are already there in our memorandum.

Mr. Chairman: You have already given them.

Mr. Harold Holloway: I now come to clause 90 which is dealt with at page 79 of our memorandum. Sub-clause (a) (iii) of this clause provides for inclusion of the additional words:

'or developed or such market capable of being created is not being created.'

Our submission is that while it is quite reasonable to expect the Controller to ascertain whether an existing market is being satisfied to an adequate extent, it is not reasonable to expect the Controller to determine whether a market is capable of being created. Whether a market is being supplied is a matter of fact. Whether a market is capable of being created is really not possible of judicial or semi-judicial determination. We do believe that in this case the words 'a

market for the export of the patented article manufactured in India is not being supplied' are fair and reasonable but that the reference to possible creation is something which even Socrates could hardly have decided fairly. Therefore, we do hope that our recommendation will be accepted and that those additional words will be deleted.

Then, I come to clause 8 about which you must already have heard a great deal, and that is referred to at page 31 of our memorandum. This relates to the obligation upon an applicant to keep the Patent Office informed of the filing of applications in other countries and of official objections and the amendments made thereon. I would like you and the Members to consider the additional expense that this would involve, and this will become evident when you take into account the fact that any major patent today is protected in eighty or more countries. Also, the obligation on our friends—because they are all friends—in the Patent Office would be such that the task of keeping these extra records would be as impossible as it would be for my firm or any other.

Shri R. Ramanathan Chettiar: What is the practice in the UK?

Mr. Harold Holloway: In the UK there is no such obligation. This proposal is based, I believe, on the Canadian practice, since the Canadians sometimes, but very rarely, make such enquiries; I say this on the basis of experience because my firm has on behalf of Indian applicants, filed applications in Canada, and very occasionally we have had an enquiry because the Canadians are sometimes interested in what has happened in the USA. Although we file applications all round the world for Indian parties, we have no experience of anybody else calling for this information. I do not know how the successive Controllers, even though they be men of great wisdom and learn-

ing, will be able to translate some of these other applications and documents or what they would do with them.

Shri R. Ramanathan Chettiar: Can you enlighten us about any other easier method by which Government could obtain this information?

Mr. Harold Holloway: I do not think it is really possible and I do not think that there would be any utility in securing this information, because the law in India is already different from that in other countries. When this Bill comes into effect, it will be even more different. So, I do not think that much guidance would be available from what happens in other countries. We have made an appraisal and we reckon that it could land an applicant from the USA in an additional expenditure of Rs. 10,000. That is not an arbitrary figure it is based on calculation which we have made.

Shri R. Ramanathan Chettiar: What is the practice in the USA?

Mr. Harold Holloway: There is no such obligation in the USA.

Shri R. Ramanathan Chettiar: It is there only in Canada?

Mr. Harold Holloway: Even in Canada, to the best of our knowledge, it is not a statutory or official obligation; it is merely a case of the examiners sometimes asking for information with reference only to the USA. But we do not believe that it would ever be an advantage. It would be a disadvantage to the applicants, in the matter of expenditure, to the agents in the matter of handling, and also to the Patent Office. Therefore, there can hardly be any justification for this new burden. So we do ask you to look particularly carefully at the necessity for this clause

The third one of these particular anxieties is in regard to Clause 89

which is dealt with at page 76 of our memorandum. Our anxiety here is this. There are overseas patentees particularly who would like to manufacture in India, but nobody from overseas can manufacture here unless he can get the necessary permission. If an inventor obtains a patent in this country, which he is not permitted himself to work, and it is notified as "licences of right",—you know what that means; it means that anybody can use it—or a compulsory licence has been granted in its respect it does seem to us unreasonable that the patent should then, on the top of all that, be liable to be revoked. For, as we have pointed out, it could happen that after it was revoked, a licence to manufacture might be granted to the Patentee. We hope therefore that you will rest content in such cases with the power to grant compulsory licences and you will not insist also on having the power to revoke. India's position is unusual in that the system of industrial licensing is rather tighter, for understandable reasons, than in most other countries.

The fourth point is in regard to clause 102 which is dealt with at page 88 of our memorandum. I am referring to item (a) on this page. I have mentioned this before so I will not repeat it. I did indicate, however the case of a patentee who could be in a worse position by securing a patent here, in that he might, as a result of acquisition of the patent, be prevented from himself manufacturing, so, we would ask you to reconsider this clause, because it will have a deterrent effect upon the making of applications for patents both in regard to Indian inventors as well as in regard to overseas inventors.

Shri R. Ramanathan Chettiar: It is in respect of defence inventions.

Mr. Harold Holloway: There is no such restriction in that respect. It is for a "public purpose" which includes a Government undertaking. It is a very wide term and that is one of the points of anxiety.

Then, I turn to clause 47, on page 51, of our memorandum which will have an adverse effect on exports. It would mean—and this is what would happen—that if there is going to be no protection for the products even when achieved by specific processes, you would then find that parties are to be put, as they are put under the Bill, in a more favourable position if they import from outside India a product, than if they manufacture it in India, because, if they manufacture it in India, they will be infringing the process, whereas if they import it from overseas, as there would be no protection for the product, there would be no infringement.

Then clause 141(1), page 98. As we have noted in our memorandum, the effect of this provision would be that it would become a matter of chance as between two contracts: whether one is liable to be invalidated and the other should continue to be valid. This particular clause was considered at length in the Ayyangar Commission's report, and the Author came out there strongly against it; but it has reappeared here.

Shri D. P. Karmarkar: Could you elaborate this point?

Mr. Harold Holloway: I think that is quite easy. If you take the case you were mentioning earlier, the case of chloramphenicol, then, under the Bill, to import chloramphenicol would not constitute an infringement, because the product would be brought in and the product would not be protected, but if a party other than the patentee, instead of importing it, were to manufacture it in India, he would be using the process, so, he could be restrained. I do want to say that we have in my firm a very large number of people, over a hundred, who are concerned in tabulating what is going on outside as well as where in India. It is difficult enough for us to keep abreast, so we appreciate the difficulties of Ministers, but it is a fact that the Minister was misinformed in the speech that he made as to the position

of product—patents in other countries. Would I be permitted to refer to that?

Mr. Chairman: Yes.

Mr. Harold Holloway: I quote from the speech of the Minister, who said:

“Shri Dandekar and Shri N. C. Chatterjee think that nowhere was this difference existing between processes and products. I would submit that this difference exists already in many countries. I have got a long list of such countries here with me, namely, Argentina, Austria, Brazil, Belgium, Canada, Chile, Czechoslovakia, Denmark, Finland, the Federal Republic of Germany, etc., where foodstuffs, pharmaceutical preparations and product—obtained by chemical processes are not patentable, but only processes for preparing them are patentable.”

The difficulty here is understandable. Different Acts take different forms. In certain cases, one Act may say that certain things only are patentable, and at a different place deal with infringements so that it would be quite natural for somebody who perhaps had not seen the Act, to assume that a product, even when achieved by a particular process, is not protected; if this were not listed but, if you look elsewhere in the statutes, you would find that for the purposes of establishing infringement, protection is given to such a product.

Argentina, for example, far from not allowing products when achieved by a process, allows clinical products *per se*, and there is a very good reason for this. The whole tendency in the world today, I submit with respect, is to extend protection to products *per se* in the interests of the little man; for example, if you are a big company, when you make an invention and you achieve a product by means of a specific process, then you set out, with the aid of massive research, to discover all the other processes by which you can achieve the

same product. If you are a small individual you may, with a little capital, perhaps discover a process which gives you a particular product, but you have not got the means nor the resources to discover all the other possible processes. In India, heretofore, although it has not been specifically stated in the statute, it is well-established practice that one only gets protection for a product when achieved by the process which is specified, and there would be no objection from the standpoint, I think, of patent practitioners, if a specific effect were to be given to this in the statute. That was proposed in the Tek Chand Enquiry Committee, and in the 1953 Bill it also found place. In Argentina, far from having no protection for products when achieved by processes, they have gone the whole way, so that, a patentee secures protection for such a product, howsoever achieved. The next country is Belgium; there is no such restriction there. In Canada, the products prepared by particularly described processes are allowable.

Shri D. P. Karmarkar: Clause 5 specifically relates to medicine, drugs and substances produced by chemical processes. In those cases, the products cannot be patented.

Mr. Harold Holloway: That is right, but the term "chemical products" covers almost all products.

Mr. Chairman: What is your next point?

Mr. Harold Holloway: Really you have a list there of six countries—Argentina, Belgium, Canada, Austria, Brazil and Germany—where the position is very different, as members might have gathered. I do not want to say this critically. As I said, it is very difficult to ascertain the true position. It is only by getting our fingers burnt that we have over the years been able to ascertain these things. This is a very difficult subject. That is why we have to point out some of these things to you and to this committee.

Mr. Chairman: How much more time do you require?

Mr. Harold Holloway: I will try to finish in half an hour.

Mr. Chairman: You may continue your evidence tomorrow. We shall now adjourn and meet again at 1.30 P.M. tomorrow.

(The witnesses then withdrew)

(The Committee then adjourned)

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1966

Saturday, the 29th January, 1966 at 13.30 hours

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman

MEMBERS

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2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Panna Lal Barupal
5. Shri Bibhuti Mishra
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
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19. Shri Chhotubhai M. Patel
20. Shri Naval Prabhakar
21. Shri R. Ramanathan Chettiar
22. Shri Sham Lal Saraf
23. Shri A. T. Sarma
24. Dr. C. B. Singh
25. Dr. L. M. Singhvi
26. Shri P. Venkatasubbaiah
27. Shri K. K. Warior
28. Shri Ram Sewak Yadav.

Rajya Sabha

29. Shri Arjun Arora
30. Shri Babubhai M. Chinai
31. Shri Vimalkumar M. Chordia
32. Shri D. P. Karmarkar
33. Shri B. T. Kulkarni
34. Shri P. K. Kumaran

35. Shri Shyamnandan Mishra
36. Shri Dahyabhai V. Patel
37. Shri Mulka Govinda Reddy
38. Dr. M. M. S. Siddhu
39. Shri Dalpat Singh
40. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
4. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

Remfry & Son, Patent and Trade Mark Attorneys, Calcutta.

1. Mr. Harold Holloway.
2. Mr. Desh Pal Ahuja.
3. Mr. Baldev Chaturbhuj Ojha.

Remfry & Son, Patent and Trade Mark Attorneys, Calcutta

Spokesmen:

1. Mr. Harold Holloway
2. Mr. Desh Pal Ahuja
3. Mr. Baldev Chaturbhuj Ojha

(The witnesses were called in and they took their seats)

Mr. Chairman: You were on clause 102 yesterday.

Mr. Harold Holloway: In accordance with your instructions, we have submitted a note concerning the two points.

There was one point which arose yesterday when the Draftsman drew attention to the fact that 'patent' was defined in the Bill by reference to patents granted under the present Act. It was pointed out that one of my apprehensions concerning the effect of a clause on patents already

granted was ill-based, because of the definition, and that wherever patents which were granted under the previous Act were to be affected, it was specifically stated. If the Bill is examined, then it will be found that there are many discrepancies. For example, Clause 84(1) which deals with compulsory licences, says:

"At any time after the expiration of three years from the date of the sealing of a patent . . ."

"A patent" means, according to the definition, "a patent granted under

this Act". Now there are a wide variety of other references; as for example, concerning the restoration of patent rights, when there is a similar reference only to "a patent". Again a patentee in India gets his right to file a suit for infringement by virtue of the statute and not as in England by virtue of the terms of letters patent. The clause dealing with the right to bring an infringement suit refers only to "a patent"; it does not make any reference to patents previously granted. I think the reason for that is intended to be the savings clause which is to be found in paragraph 3 of Clause 162:

"Save as otherwise provided in sub-section (2), the provisions of this Act shall apply to any application for a patent pending at the commencement of this Act and to any proceedings consequent thereon and to any patent granted in pursuance thereof."

So the applications which are pending at the time when the new Act comes into force are well taken care of.

But there appears to be no other provision except 162(4):

"The mention of particular matters in this section shall not prejudice the general application of the General Clauses Act, 1897, with respect to repeals."

The learned Draftsman made the point that 'patents' meant the new patents except where it is specifically stated otherwise in the Bill. It does seem undesirable that, while in some cases reference is made in the clauses to the fact that such clauses are to cover all patents, whether they were granted under the previous Act or under the new one, in other clauses there is no such reference. I would suggest respectfully that consideration be given to the possibility of following the same pattern throughout. At one place it has been specified

that a clause is to apply to all those patents granted under the earlier Act as well as under the present Act. That pattern should be followed throughout; otherwise, misunderstandings of the sort to which I was a party yesterday, are likely to occur.

In the 1953 Bill there was an additional provision which read like this—this is 115(3):

"Save as otherwise provided in sub-section (2) the provisions of this Act shall apply to any application for a patent pending at the commencement of this Act, and to any proceedings consequent thereon to any patent granted in pursuance thereof".

There was thus more extensive provision in the 1953 Bill. In the Patents and Designs Act of the U.K. of 1907 a rather easier procedure was, I think, followed. 'Patent' was defined to mean "letters patent for an invention."

Shri R. Ramanathan Chettiar: Since then a lot of water has flowed underneath the bridge. You are referring to the 1907 Act.

Mr. Harold Holloway: Quite, but in this country we have never had any occasion to repeal any Patents Act. It is the first time that this is occurring. Of course, no one is bound by what has occurred anywhere else, but it is of interest that they define, in such 1907 Act, "patent" to cover all patents and then put in a further specific provision which was 98(2).

"Except where otherwise expressly provided, this Act shall extend to all patents granted and all designs registered before the commencement of this Act, and to applications then pending in substitution for such enactments as would have applied thereto if this Act had not been passed."

In that case there is no doubt. It might be worth while for you to con-

sider inclusion of a definition of a "patent", by referring in to the same way as it occurred in this (1907) Act, to any patent, that is under whatever Act, and then to make it plain that all the provisions would apply except where it is expressly stated otherwise, irrespective of the Act under which the patent had been obtained. At the moment it does seem as if we are doing some of the one and some of the other, which is certainly inconsistent and liable to make it more difficult for patentees and others to interpret these provisions.

Shri R. P. Sinha: You mean that our definition of 'patent' should be revised accordingly?

Mr. Harold Holloway: Yes, I think that would be easier. At the moment the definition a patent is to a patent granted under the new Act. For the next fourteen years anyway there should be patents on the Register that have been granted under the 1911 Act, and it certainly will make it more difficult for the Patent Office staff and for everybody else if, instead of a clear provision of the type I have just read out that was followed not only in 1907 but subsequently also in other British Acts, you introduce a clause which is not so clear; then all the time one will have the initial problem of deciding whether any particular clause, by virtue of the General Clauses Act or some other provision, means what it says to the extent of covering all patents or only patents under the new Act, and there will be confusion. The learned Draftsman pointed out yesterday that in certain clauses mention was made of the fact that the clause would apply to both classes of patents. If in some cases this is stated, I think it should be similarly stated in all other cases where this is intended.

Shri D. P. Karmarkar: Your point, I take it, is that the Act should be so worded, all the clauses, so that what is applicable only to new patents and

what is applicable to both patents ought to be clear?

Mr. Harold Holloway: The whole Act should apply to every patent except where it is specifically stated otherwise. That is the simplest procedure.

Sir, yesterday when you concluded the proceedings I had just referred to the fact that there were certain inaccuracies concerning the countries in which protection for products were obtained by specific processes is given and is not given. Moving on from there, I think that point is important, because clearly India, like every other country, must in a matter of this sort pay some respect to the practices that obtain in other countries. Otherwise, if one is completely out of step, the question of the commercial exchange of Patented goods and other things, the question of joining the International Convention, etc. would become complicated, if not impossible.

On this matter of inventions which are not patentable I would invite your attention to page 27 of our memorandum. It is under this clause 5, that products are said not to be patentable even when achieved by a specific process. Now, if one looks at other portions of the Bill, they would seem to indicate that these products are patentable. I am comparing clause 5, referred to on page 27 of our memorandum, with clause 47 (1) (i) referred to on page 51 of our memorandum. Clause 5 says that products are not patentable in India but clause 47(1)(b) suggests that substance as by process and Patentable. Elsewhere in the Act (clause 48) we are told that it will not constitute infringement if Government imports or authorises the import of these products. Clearly, if products even when obtained by particular processes which are thus protected are not to be protected, then there would seem

to be no reason why there should be a particular exemption in respect of Government concerning the imports of these products. If these products are not covered by patent protection, then if Government or anybody else imports them, there would be no infringement.

The hon. Minister in the Lok Sabha on the 22nd November, 1965 said: "Thirdly Government could authorise such licensees to import the patented article from any source, wherever it is available at a cheap price for sale in India, subject to the payment of a reasonable royalty to the patent-holder."

That quotation followed a discussion on drug patents. The quotation does suggest that the Minister was under the impression that there would be protection for products when secured by the particular process, and that is borne out by the language of clause 48.

Clause 48 reads thus:

Notwithstanding anything contained in this Act,—

* * * *

(b) the importation by or on behalf of the Government of any patented medicine or drug for the purpose merely of its own use.

Shall not be deemed to constitute an infringement of the rights conferred on the patentee by this Act.

I think, therefore, that it will need a policy decision by Parliament or by this Committee, no doubt, as to whether protection is to be granted to products as is suggested by clause 48, or whether there is to be no such protection as envisaged by clause 5, because clearly, if there is no protection, then there is no reason why the Minister should have suggested that royalty would be paid to the patent-holders. We are wholeheartedly in favour of some protection for the product. I mentioned yesterday that it was in the interests of the little man parti-

cularly, that there should be such protection, and, if there was no such protection, then these patents would be virtually valueless because anybody could import the product. We do ask you to consider this question of product patents. We have put forward a suggestion in this regard at page 29, of our Memorandum as to how this clause 5 could be re-drafted so as to bring it in line with the rest of the Bill. Our recommendation is set out at page 29 in paragraph 7. If that draft is not acceptable, then it might be worth-while having a look at the 1953 Bill. Sub-clause (d) of clause (3) of Bill says what is not patentable. The language used there is very felicitous. It is as follows:

"A substance prepared or produced by a chemical process or intended for food or medicine other than a substance prepared or produced by any method or process of manufacture particularly described in the complete specification of the invention or by its obvious chemical equivalent."

There are a number of variations which could easily be made so as to give the some effect as this sub-clause (d).

If it is decided that products when secured by a protected process should also be protected, then there is another problem which I would like to put before you. This is not covered in our memorandum except in the introduction. In such introduction, we have referred at the bottom of page 2 to the fact that in the UK it was found that it was not really enough merely to give protection to a product, as was the case in the UK up to 1919, and as is, of course, the position in India today, because if somebody imported a product, a chemical product, it was very difficult for a patentee to establish that such product had been manufactured by any particular process. So, the UK Act, section 38A (2) not unreasonably, in those circumstances, declared that a product would be

deemed to have been manufactured by the protected process unless it could be proved that some other process had been used.

A lot has been said about the delays. Delays in these matters do result from proving or endeavouring to prove that no other process but the protected process could have been used. I would suggest that that matter also be looked into.

The other two points that I would like to deal with concern food and drugs. The definition of food in clause 2 has been covered at page 12 of our memorandum. At the present time, the definition is proposed to be.

“‘food’ means any substance intended for the use of, or capable of being used by, babies, invalids or convalescents as an article of food or drink . . .”.

Most of you will have heard of the English proverb ‘One man’s meat is another’s poison’. I think most Members would agree that it is impossible to think of any item of food which somebody during some human malady could not be advised to consume as a food. If you are going to include ‘intended for the use’ of, then these words are more than covered; the words ‘capable of being used’. Since the latter would really cover every sort of food.

We have the same sort of problem with regard to sub-section (1) of section 20 of the Atomic Energy Act. If you would kindly look at page 25 of our printed memorandum, you would see that mention is made in the Atomic Energy Act that:

“As from the commencement of this Act, no patents shall be granted for inventions which in the opinion of the Central Government are useful for or relate to the production . . .”.

As we have pointed out, even a brick wall could be useful for such

production. In actual working, this has been found to give a great deal of trouble, because many applications which have only had the most incidental use for atomic purposes have been held not to be patentable by virtue of the words ‘or useful for’. We would like to see the words ‘primarily relate to’ substituted. Similarly, with regard to the definition of ‘food’, we would like to see the words ‘primarily intended’ introduced in the Bill. There could never be any doubt in the mind of the learned Controller whether something was “primarily” intended to be food for babies or convalescents, but if we include in the definition the words ‘capable of being used’ then it would mean that all food would be covered.

Mr. Chairman: You have stated all this in your memorandum.

Shri Ramanathan Chettiar: Mr. Harold Holloway has been only repeating whatever is contained in the memorandum. I think it would be better if he were to supplement what he has said and also bring in new points. Otherwise, I think we should be permitted to ask him questions now.

Mr. Harold Holloway: Can I bring in immediately two new points that have not been covered?

Shri Sham Lal Saraf: Certain points made by the witness are such that if some of it is accepted then consequential changes would naturally follow. Therefore, the witness need not take pains in explaining all those things in detail now.

Mr. Chairman: That is what I have been suggesting that he need not repeat what is there in his memorandum, which is already there before us all. He has already dealt with all these points in detail in his memorandum. So, he need not repeat those things.

Mr. Harold Holloway: Can I deal with two additional points?

Mr. Chairman: If you have anything new or anything to supplement what you have stated in your memorandum, you may do so.

Mr. Harold Holloway: This is entirely new, Cl. 87—p. 73 of our memorandum, in that we have dealt solely with food and medicines; we have not dealt with sub-clause (a) (iii) which renders all patents relating to methods or processes for the manufacture or production of chemical substances liable to endorsement with the words 'Licences of right'. If you would look to the notes on clauses in the Bill against cl. 87, you will find the statement:

"These provisions are intended to secure the proper development of the drug and chemical industries in the country".

We have not commented on the chemical industries part of the clause, but there appears to be no reason why the chemical industry, quite apart from the food and drug industry, should be singled out for marking immediately as 'Licences of right'. If it is really accepted that this provision is necessary to secure the proper development of the food, drug and chemical industries—and we agree that customarily special considerations are felt to apply to food and drug patents—then if chemicals are brought in here, it does seem difficult to make any distinction between them and patents relating to machinery of tele-communications and so on. If it is really felt that these industries cannot be properly developed if these patents are not marked with the words 'Licences of Right', then that argument could be considered equally applicable to every other kind of patent. If that view is really felt, with respect then it would probably be worth considering whether any Patents Bill is desirable. We do not really see why the chemical industry should be singled out in this particular way.

Another point—the final point—concerns the qualifications for patent agents. One of the things that has occurred in this country, in the profes-

sion relating to patents and trade marks, has been that much benefit has been derived from the rich experience of senior officials when they have retired, in assisting others and in helping to train younger people in their profession. Now everybody knows that last year twice as many patent applications were filed as in 1956. There is a shortage of staff at the Patent Office. If we are going to make provision in the Act to prevent any officer who has been a hearing officer for more than twelve months from practice, that will mean that a large number of examiners, before they have been in offices for more than a year will leave the Patent Office after 7 years or so because they will be disqualified from practice in later life if they do not do so. Under existing regulations, so I understand, in Government service, class I officers cannot take such private employment except with special permission, within two years of retirement from Government Service. It does seem that this general provision is quite sufficient to cover these cases and that it is not necessary or desirable to impose a particular restriction on the staff of the Patent Office, which does not apply for example, against High Court Judges or others.

The relevant clause is 126(c)(iv):

"has served in the office of the Controller as an examiner of patents or in any higher capacity for a period of not less than seven years:

Provided that he had not exercised the functions of a hearing officer for a period exceeding twelve months in all during his tenure of office".

I think that will create administrative problems. In our note I did ask leave to be able to add to the comments on the qualifications of patent agents.

It is, as was noted in the Ayyangar Commission Report, a matter of fact that in other countries where specific requirements have been imposed, they

have been brought into effect gradually. In our very first note in the memorandum on the "commencement of the Act" we have suggested that, as in the case of the Merchant Shipping Act and one or two other such complicated Acts, power should be taken to make it possible to bring the statute into operation in phases, if Government feels at the time that this is right. Clearly, if this part of the Bill concerning Patent Agents and Firms were to become law very shortly, there would be complete dislocation. In my own firm, for example, we have some members of our staff who have been doing the same job for 40 years or so, as for example in the matter of filing. Similarly, in the Patent Office, they no doubt have staff who are employed on work peculiarly adapted to the existing Act. If immediately there are to be fundamental changes without anybody having had time to adapt himself or to qualify himself, there will be dislocation, and the Controller of Patents would be very much in the position of a Judge having to decide cases without counsels' aids, because there will be so few people who qualify immediately to become patent agents. I would ask that the Committee give consideration, no doubt after consultation with the officials, who, I think, would reflect this view, to our recommendation that there should be a period of grace of say five years or so, if these clauses concerning practice are really going to be adhered to.

Another alternative which has been suggested by other practitioners in India is that a list might be compiled at once of *bona fide* practitioners, as happened in the UK, by the Controller, to whom application would have to be made within a year from the coming into force of the Act.

This is really vital to the administration of any Act. All those who practice get on very well with the Patent Office. For example, if we practitioners were to put in all our hundreds of applications in disorder, chaos would result at the Patent Office.

They are used to receiving applications in good order. Therefore, it is essential that any changes should be made gradually, so as to permit this state of affairs to continue.

On the point of administration, I would like to draw attention to the fact that this Bill will impose a very heavy additional burden on the Patent Office. Some of the clauses on which we have commented do involve some extra work which we believe is unnecessary.

Mr. Chairman: That is for Government to consider.

Shri R. Ramanathan Chettiar: No chaos.

Mr. Harold Holloway: The Clauses which require particular attention are 2, 7, 8, 10, 12, 13, 18, 21, 39, 42, 57, 69, 85 and 93. They all involve additional work.

On the position of the Indian inventor, I want to say this. First, the Act should have as a main object the encouragement of research. Secondly.....

Mr. Chairman: You have stated that in your memorandum.

Mr. Harold Holloway: I have not quite said that.

Now, under clause 13, Indian inventors are going to be very seriously hit.

Mr. Chairman: You may leave the rest to the Committee.

Shri P. S. Naskar: Mr. Holloway, you are representing a very old firm and a very reputable firm. Your concluding sentence was that the purpose of this Patents Bill should be to see that the inventions and the research or rather the industrial growth is helped. You are in this line for many years. The Patents law is in existence for a long time. Can you

tell me out of the number of patents that have been granted, how many are owned by Indians and how many are owned by non-Indians? The non-Indians who are having the patents are not working them inside the country. How can it help the industrial growth.

Mr. Harold Holloway: I think, today, for obvious reasons, there have to be stringent import controls....

Shri P. S. Naskar: I am not talking of today. The Patents law has been in existence in the country for a long time. I have got the figures. Very few patents especially in the pharmaceuticals industry have been granted to Indians and quite a very large number, I should say 80 per cent, of patents have been taken up by the non-Indian concerns who just do not work them inside the country. They do not function inside the country. In this way, they are retarding our industrial growth. Don't you agree with me?

Mr. Harold Holloway: I agree that in this country, as in every other country, excluding the United States, the majority of patents, not only in the pharmaceuticals industry but in every field, are owned by foreigners. In India, in the pharmaceuticals field which involves a very costly research, it is quite likely that the majority of the patents will continue for a long time to be held by foreigners.

Shri P. S. Naskar: I do not mind research being done by them. They are holding the patents but they are not working them inside the country to help our industrial growth. By this they are retarding our industrial growth. Do you agree to that?

Mr. Harold Holloway: I will not agree with that. I share the view of one of the critics of the present patent situation who mentioned in the Lok Sabha that in 1948, the drugs that were produced were worth

Rs. 10 millions and today that figure has risen to Rs. 1000 millions, which represents a hundred times growth. We want to see even quicker growth....

Shri P. S. Naskar: But how? You take the patents but you do not work them in the country and you have the monopoly of importation of the bulk supply in this country. You just put it in bottles and sell them here. How does that help our industrial growth?

Mr. Harold Holloway: In the pharmaceutical industry, in India there is a good amount of collaboration between the overseas companies, who are engaged in research, and the local manufacturers. Indian technicians are being trained here and overseas.

With regard to the importation of products, I agree that some years ago, it was commonplace that even intermediates had to be imported.

Shri P. S. Naskar: Even today. I restrict the scope of my question to this. There are quite a few life-saving drugs. Can you tell me in respect of how many life-saving drugs, the bulk is imported under the monopolistic system and how many drugs are being manufactured under the patents inside the country?

Mr. Harold Holloway: For instance, take the case of chloramphenicol. I am taking one specific case of which I know something. You have one company which developed this drug. Five of its competitors and its own subsidiary in India, have been licensed to manufacture here. The Government decided the capacity which it wanted, and that capacity was met by such local manufacturing arrangements. Since 1961...

Shri P. S. Naskar: Who supplied the raw material?

Mr. Harold Holloway: ... there has been no import of any intermediates but only of raw materials.

Shri M. R. Masani: I would like the witness to tell us a little about the statement made on p. 7 of their Memorandum to the effect that there are several aspects of this Bill which would prevent India from becoming a member of the International Convention. What are the aspects which would come in the way?

Mr. Harold Holloway: I would refer you to p. 118 of the Ayyangar Commission's Report. I would like to make this point: the Ayyangar Commission never envisaged the abolition of appeals. It did not envisage the licensing of right which is proposed in respect of a wide range of patents. This Bill goes much further. The Ayyangar Report did note the danger. It says in para 307:

"Apart from any theoretical or ideological preference for or against the Convention, I would point out two matters which have a vital bearing on any decision on this matter. The first is that some of the recommendations which I have made and which I consider essential to achieve the adequate working of inventions in the country are not in accordance with the Convention...."

In this country, we need assistance in developing our industries. I think it is a serious step to introduce the Bill which would later on make India inadmissible to join the Convention. One such disability results from the London and Lisbon amendment of the International Convention.

Shri Sham Lal Saraf: How does it militate against the present convention?

Mr. Harold Holloway: Thus the Lisbon revision says:

"(3) Revocation of the patent shall not be provided for except in cases where the granting of compulsory licences would not have been sufficient to prevent such abuses. No proceeding for the cancellation or revocation of a patent may be instituted before

the expiration of two years from the granting of the first compulsory licence."

This Bill envisages a more drastic procedure.

Shri M. R. Masani: My next question is about the Soviet Union. In what year did the Soviet Union join the International Convention? What are the factors that led the Soviet Union to change its position and become a member of the International Convention?

Mr. Harold Holloway: I was not aware of it. I accept the Hon. Member's information that Russia is a member of the Convention. Personally, we have always found that, when in India we have told Russians that they were infringing somebody else's patents, they have been anxious to respect such patent rights. They have a slightly different system in Russia. They have also certificates of authorship which, I think, involve payment of royalty. Anybody can use an invention so held subject to payment. The reasons, I think, for Russians instituting a patent system are exactly those which prevent Italy, in practice, from abolishing permanently the patent system concerning medicines. In fact, most of the big Italian manufacturers conducted a private system of voluntary licensing with the bigger companies throughout the world, because if they had not done that, they would not have been able to export. That is one of the dangers that we apprehend in India.

Shri M. R. Masani: Can you tell us anything about the proposed move in Italy to bring the patent law in conformity with the International Convention?

Mr. Harold Holloway: The immediate occasion for the new Bill is the need for uniformity with the other countries of the European Common Market. But, as I have said,

there are already many cases of private licensing arrangements, while their exports would be affected.

Shri M. R. Masani: We shall be grateful if you can make available a copy of the new Bill.

My next question is this. The present Bill seeks to abolish the time limit within which a patent must be issued. Would you favour the restoration of the time limit so that long delays do not take place and would you think that the limits in the present Act are roughly fair and adequate for that purpose?

Mr. Harold Holloway: The period is proposed to be 15 months, subject to a three monthly extension from the date of the first official examination. I think we are dealing with that. As a result of accumulation of work, an impossible situation has already been reached in the Patent Office, and applications are now able only to be examined just before the expiry of the existing 18 month statutory period. Under the new system it is clear that patents are going to be granted three years after filing, or even four or five years after. If the period is to be calculated from the first examination report, it means that more time will be taken which also has the consequence of reducing further the effective life of the patents from 14 or 10 years to a lesser term.

Mr. Chairman: Would you like to put any time limit?

Mr. Harold Holloway: I think the factual situation is such that we must accept the inevitable. May I, in this connection, read out a short letter which has come to us from a foreign Government, which applied for a patent in India; it has a direct bearing on this matter?

"In this connection we wish to draw attention to the fact that the relevant official letter, dated 20th August, was a first official

action and allowed a period of only 14 days in which to file a response. The action was not, in fact, received by us until 1st September making it absolutely impossible to reply within the stipulated period. It is considered quite unreasonable that Patent Office should exact from an applicant a fee for an extension of time which was only necessary because of its own delay in issuing a first official action a mere fourteen days before the expiration of the normal period for securing acceptance. This is felt to be a special hardship in the case of an applicant, abroad where the whole of the short term available for response can be lost, as it was in this case, in quite normal postal transit times.

Will you, therefore, on our behalf, please make the strongest possible protest to the Patent Office in respect of this gross imposition."

We did nothing of that sort. We have loyalty also to the Patent Office here. We know the present problems of examination, so, in these circumstances, we have explained the position to the Government concerned.

Dr. L. M. Singhvi: Regarding Clause 115, you have pointed out that it would be improper for the Government to draw up a list of experts to be consulted in matters where litigation arises. Would you like to suggest an alternative means of drawing up the list of experts or would you like to leave it to the Court to determine as to who is an expert on a particular subject as and when occasion arises?

Mr. Harold Holloway: The 1953 Bill would have permitted the Courts to seek the assistance of experts, but the Courts, no doubt, after hearing the parties would themselves have been responsible for deciding who the experts should be. It seems to me that, when you have a new Bill which gives Government a special position

with regard to the manufacture of patents, commercial use and so on, it is really undesirable that there should be a Government-controlled list. It would be fair to leave it to the Court, as was proposed under the 1953 Bill, to make its own selection and to fix *ad hoc* remuneration.

Shri R. Ramanathan Chettiar: The 1953 Bill was introduced but was withdrawn.

Dr. L. M. Singhvi: You have opposed the abolition of appeals to High Courts and have advocated that an appeal should invariably and in all cases lie to High Court. Would you suggest that in between an appeal to the High Court and a writ proceeding before the High Court there should be interposed a proceeding before a Specialists Tribunal specially constituted for the purpose of patents?

Mr. Harold Holloway: In the note that we have submitted today, in the final paragraph we have expressed the desirability of a Patents Appeal Tribunal consisting of a High Court Judge which could hasten disposal of these matters. Our own view is that the Ayyangar Commission, as also the Tek Chand Inquiry Commission, were correct in saying that it was necessary that these appeals should all go to the High Court and having regard to the increased Government powers and benefits such as in Clauses 102, 99, 43 and 97, I think it would be better if the appeals did go to the High Court.

Dr. L. M. Singhvi: If you provide for an appeal before a Patents Tribunal, would you still insist on a second appeal before the High Court because if, in the first appeal, the Patents Tribunal were not able to adjudicate to the satisfaction of the aggrieved party, as writ petition might still lie before the High Court and, therefore, it would be superfluous to provide for a second appeal before the High Court.

Mr. Harold Holloway: While the general law of the country allows se-

cond appeals, there seems to be no reason why there should not be a second appeal in respect of patents. If there is not to be a second appeal, but there is to be one appeal to the Patents Appeal Tribunal or to the High Court, that it would be much better than to have no appeal at all.

Dr. L. M. Singhvi: You have made a reference to the fact that processes and technical know-how continue to come from outside into the country and that the Patents Bill, as it is proposed, would emasculate the possibility of transfer of technology. Are you aware, in the context of the fact, that the patents secured in the country have not been utilised and there is an allegation that these patents have generally been secured only to protect export pockets and not really to secure transfer of technology and secure transfer of technology and indigenous manufacture in this country?

Mr. Harold Holloway: Whatever was true in the past, today those items which are desired to be manufactured in India are being manufactured in India. We have thrown out the challenge that if anybody suitable anywhere in India wants to obtain a licence and assistance we would be ready to put him in touch with those who are engaged in that line. Government should encourage patents to manufacture here in India, but the Bill will not.

Dr. L. M. Singhvi: The Kefauver Committee of the United States pointed out that India is having the highest incidence of prices of drugs. There is the unhappy relationship between the cost of living here and the prices of drugs and other essential commodities. Do you think patent protection has played a certain part in keeping these prices high? The prices are very high in this country compared to international prices.

Mr. Harold Holloway: There are various observations which should be

made on the prices of patented and unpatented medicines. We cannot see any great differential. If one looks at the general level of rising prices in this and other countries, one tends to see the position in better perspective and not to attribute those to the existence of patents. A certain enquiry went out from Government whereby certain companies in India were asked to report whether they were manufacturing goods under patents, and if so, what goods. The majority of them had no idea for the simple reason that they were not being charged anything by their parent companies. The patent companies say: Manufacture like this, send us your technicians, we will train them. The local companies were thus manufacturing in complete ignorance of whether there were patents or no patents at all. I don't think those patents have a decisive bearing on prices. One of the common solvents in the case of drugs is alcohol. That is subject to excise and various other charges. There is one big company in Bombay a subsidiary of an overseas company, which has been manufacturing drugs in India since 1904, and I understand they have never paid the parent company one anna of royalty during that period. I think that unless there were an investigation as to whether there is any differential in the increasing costs of unpatented medicines and patented medicines it would be premature to draw any conclusion.

Shri P. S. Naskar: In respect of patented drugs coming from outside the same thing is sold cheaper outside and it is sold so costly in India. That is just imported. Why it is more costly here than in other countries? That was Dr. Singhvi's question.

Mr. Harold Holloway: A number of these drugs are partly imported and partly made here.

Shri P. S. Naskar: Price is so high because of taxation only, or is it due to the high profit motive there?

Mr. Harold Holloway: Patents have nothing to do with it....

Shri P. S. Naskar: The same company sells at one price which is called international price outside and that very drug is sold in India very much higher.

Dr. L. M. Singhvi: The figures that we have in this regard have pointed out the very wide variation in the prices of the same drug in different companies manufactured and sold by the same agency. My question is this. What part do patents play in this regard? Are they interested in preserving export market and making such profit as they can make by exporting these things rather than furthering the possibility of indigenous manufacture of these medicines or drugs which would bring down the prices?

Mr. Harold Holloway: There are specific drugs the prices of which are lower. If you were able to manufacture in India in sufficient quantities, then it would follow that the bigger the production the lower would be the price. If you look around you will find that prices of a lot of drugs are coming down.

Dr. L. M. Singhvi: For the same drug the same company charges different prices when it is sold in India and in other countries. Why this variation?

Mr. Harold Holloway: There are lot of other goods....

Shri P. S. Naskar: That is because of patents? Or, because of other considerations?

Mr. Harold Holloway: If a man looks for profit, then he is as anxious to make a profit on a product that is unpatented as it is patented.

Dr. L. M. Singhvi: Patents make him sure because he has monopoly in this market. He can make any profit without any fear of competition from any quarter. What is the

period that we should prescribe? From when should this period begin and what are the reasons for indicating as to the suitability of indicating particular period?

Mr. Harold Holloway: Do you mean the life of the patent?

Dr. L. M. Singhvi: Period of the life of the patent.

Mr. Harold Holloway: I like the idea of 16 years.

Dr. L. M. Singhvi: Is it 16 years from the date of grant of patent or from the date of application?

Mr. Harold Holloway: The date of grant as the longer the period the better it would be for patentees. I would like to refer you to what the Tek Chand Committee suggested.

Shri Kashi Ram Gupta: In your memorandum you suggested amendment of section 20 of the Atomic Energy Act. Are you not aware of the fact that this committee is not supposed to go into that sort of arrangement? What was the purpose of your bringing this into the Memorandum?

Mr. Chairman: He has referred to it only as an example.

Shri Kashi Ram Gupta: He has said that it should be amended.

Mr. Harold Holloway: Clause 4 of the Bill reads thus:

"No patent shall be granted in respect of an invention relating to atomic energy falling within sub-section (1) of section 20 of the Atomic Energy, Act, 1962".

As reference was being made in the Bill to that section, it appeared appropriate to draw the members' attention to the difficulties experienced in its administration.

Shri Kashi Ram Gupta: You have suggested amendments, modifications and deletions of about 50 clauses. Does it mean that the rest of the clauses are agreeable to you?

Mr. Harold Holloway: In paragraph 2 of our Introduction we have stated as follows:

"In short, we would ask that our detailed comments, many of which are of a technical nature, against the various Clauses, should not be construed as implying approval either of the shape of the Bill as a whole or of any individual Clauses".

Shri Kashi Ram Gupta: It means that you do not take responsibility for anything—even for your suggestions for amendment.

Mr. Harold Holloway: I am sorry if we have given that impression. These suggestions have been made in the interest of patentees and are aimed at improving the working of the law. We naturally take responsibility for these recommendations, and we shall help to work the new Bill to the best of our ability. We are also prepared to render any other assistance, either informally or formally to make the Bill workable.

Shri Kashi Ram Gupta: In view of the fact that lot of clauses are for deletion, do you mean to say that the old Act should be there and there should be no amendments?

Mr. Harold Holloway: Yes, but I think some clauses of the Bill would have to be deleted, especially the provision which makes it obligatory that one must give enough information to make it workable by the average skilled technician in India. That really means that you must give "know-how" which is inappropriate and impossible in a specification. If you could get all the information you want from a specification, there would then be no need nor use to send Indians

overseas to get training. There is a lot more involved in this. Such a clause in a U.K. Bill was found on examination to be utterly unworkable. A clause like that cannot be amended. It can only be retained, although unworkable, or in the alternative deleted. Anyone could say "I am an average technician. I cannot understand your specification. Therefore, I am entitled to have the patent revoked". How can one expect the Indian Courts to decide what an average technician knows or does not know? That really is not proper.

Shri Kashi Ram Gupta: You have suggested so many amendments. Why don't you bring forward a parallel Bill so that we can consider that, instead of this?

Mr. Harold Holloway: I will be very happy to do so if I am given time.

Shri Kashi Ram Gupta: In 1963, your firm together with four others had put in a representation to the Cabinet. You have not mentioned what those firms are.

Mr. Chairman: He has given them in the memorandum.

Shri Kashi Ram Gupta: In that representation you feared that the patent policy should be abolished. In this Bill it is not abolished. There is a reduction of the period. I think you must be satisfied now.

Mr. Harold Holloway: Dealing with the first point, we did not mention the names of the other firms in our Memorandum because we did not want to associate them either informally or directly with something to which they might not have agreed. If the Committee require the names of the other firms, I will gladly give them. As regards the other point. We still have our apprehensions. In our Introduction we have listed 23 main burdens which are sought to be imposed. Of those 19 or 20 are new in the sense that....

Mr. Chairman: You have already said that yesterday.

Shri Kashi Ram Gupta: Are you aware of the fact that there are so many Indian firms who produce pharmaceutical products. They are all in favour of total abolition of the patent so far as pharmaceuticals are concerned. Have you studied their point of view?

Mr. Harold Holloway: Yes. Some of these companies are our clients and we have assisted them in securing patent protection in the country, and in others we are therefore aware that there are a very large number of Indian companies who are working in India's interest and are efficiently producing wonderful drugs.

Shri K. K. Warrior: Can we have a brief account from the learned witness as to how the patent Act is working in the newly independent countries like Egypt, Ghana, etc.?

Mr. Harold Holloway: I am aware of the position in Indonesia, Vietnam, Egypt and West Indies (Trinidad) who are members of the International Convention. Their statutes must therefore conform to the generally accepted pattern.

Shri K. K. Warrior: In the Ayyanar Report, as Mr. Masani was pleased to refer, he had recommended certain provisions in the new Bill which may militate against the Convention. But still he recommended them to be included in the Bill. Is it not in the national interest that they should be added in this Bill?

Mr. Harold Holloway: It will make India ineligible to become a member of the Convention. Thereby you will also be penalising the Indian inventor who will be denied the priority privileges which inventors all over the world value.

Shri K. K. Warrior: Does it not imply that until and unless Indian in-

inventor comes of age he can avail of the favours from the International Convention and until that time these provisions should be included?

Mr. Chairman: It is for you to decide.

Shri K. K. Warior: I want to know his opinion.

Mr. Harold Holloway: Very useful inventions are increasingly made in India. Some years ago it was very difficult to get permission from the Reserve Bank for the foreign exchange involved. They have now become fairly familiar with the procedure, and it is working very satisfactorily. I think it will be a great pity if an Indian citizen, before obtaining a patent, overseas, has not only to refer to the Controller but also to the Central Government. We want to encourage Indian inventors. I think a number of these provisions as to prior publication overseas, novelty, etc. are going to hit the Indian inventors very heavily. For example an Indian pharmaceutical company may make an invention, and to expect them to discover whether there are any prior patents in India before applying for a patent is reasonable, but to expect them to ascertain whether there has been any prior publication anywhere overseas is not, and is going to add to the cost. Why should an American company, for example come to India and challenge a patent which somebody in India has obtained as a result of research merely because in Argentina, for example, some earlier document had referred to the invention unknown to the Indian inventor?

Shri K. K. Warior: Do you think that certain products and processes which are not having the luxury of patent right in their own country should have patent right in India?

Mr. Harold Holloway: That is really matter of the inventors preference.

For example, inventors may only want to have patent protection for jute machinery in those countries like the U.K., Belgium or Thailand, where the jute is used and where they have business connections. There is nothing wrong in that.

Shri K. K. Warior: Some of the rights patented are really blocking inventions idigenously. What is your comment on this?

Mr. Harold Holloway: That is always alleged, but you have provisions for compulsory licences etc. and you have got hundreds of examples of happy voluntary collaboration.

Shri Sham Lal Saraf: You have said that the present Patents Law is encouraging collaboration and also it has helped our export trade. Do you by implication mean that the proposed bill will impede both and if so in what way?

Mr. Harold Holloway: It will certainly impede both because many patentees, looking at the situation will decide that it is not worthwhile to obtain such patent protection and collaborate in manufacturers here. After others have secured patent protection in this country and if licenses are granted summarily in the way now proposed it may well be, and this is a matter of practical reality that when exports are made from this country, the inventors will treat them as constituting infringement in other countries. That will affect India's export trade, in the same way as it has affected Italy's.

Shri Sham Lal Saraf: In certain cases, some substances are manufactured or prepared elsewhere outside the country and are sold as patent commodities here. How would you react to the idea that wherever it is possible the law should make it incumbent upon these patentees to manufacture their products here within the country?

Mr. Chairman: He has said enough about that. Dr. Singhvi raised that question and he has answered.

Shri Sham Lal Saraf: As you know, the patents or inventions are always unpredictable; Therefore, would you suggest that the codification of patents or such inventions that need not come under the law of patents should be attempted?

Mr. Harold Holloway: Under Clause 13 it is proposed to examine the applications in India to find out whether there has been any anticipatory publication outside India. Because of the unpredictability of some inventions, their utility at that stage may not be known completely until a period of time has elapsed. One can always apply to revoke a patent on the ground that there is no utility in that invention.

Shri Sham Lal Saraf: When the first law was enacted, it might have been argued in this way. In the context of present day with the ever-changing technology, would you agree that the period of 10 years should be enough time for registering the patent from the date the goods are sealed or manufactured?

Mr. Harold Holloway: The tendency today is for inventions to cease to be simple and to become very complex. As I mentioned yesterday, in the case of insecticides and things like that a longer time is required before an invention is able to be exploited commercially at all.

Shri Sham Lal Saraf: You said that where goods are patented at present the law provides that the Government may import such patented commodities or goods from elsewhere, of course on payment of reasonable royalty to the patentee here in the country. In case the Government do it for their own use, what is your objection to that?

Mr. Harold Holloway: We have made our comments against Clauses 99 to 103 of the proposed Bill. We see no reason why the Government should not have certain rights, but when you extend those rights to Government undertakings and others

for the purpose of earning profits, it seems to us that there is a fundamental conflict with the whole idea of a Patents Act, since there can be no system of patents without some element of monopoly, albeit subject to appropriate safeguards. The whole idea of giving any benefit to the inventor would then be undermined. That is where the point of departure come in. The bill goes very much wider than is necessary.

Dr. C. B. Singh: On page 4 of your memorandum you have stated in para 3 that 'with the growing demand in India, it is necessary, we believe, that the Pharmaceutical Industry, like other industries, should continue to expand, and so long as India's technicians are concerned, as they must be for some time more, with the battle of production rather than with research, it will be necessary to ensure continuing co-operation from those whose men, money and massive research are achieving the advances from which many of us have already benefitted.' Do you mean to suggest that research should be given the secondary place or be given a go-by?

Mr. Harold Holloway: There has to be a balance between production and research. As you develop your techniques in producing goods of high quality in quantity, you acquire a base from which you can engage in research. Here in India there is so much immediate need for so many of these products, that it is obvious that for some time to come the number of technicians who will be available for research, will be nothing like the numbers available in the more industrially advanced countries. Therefore, I think it is in India's interest that we continue to encourage people overseas to work their inventions here in association with Indian industry.

Dr. C. B. Singh: Are you envisaging big export market for Indian pharmaceutical goods and that is why the patent law should be tightened and protection given for a longer period?

Mr. Harold Holloway: In general, exports are likely to be encouraged, if there is an effective patent system in this country, because when goods are exported they will not constitute infringements in other countries.

Dr. C. B. Singh: You probably know that the result of research is very often accidental. Mr. Roentgen was experimenting Photographic with high machines where certain current generating electrical plates were kept which were found to have been affected by some current and he accidentally discovered X-Ray. So also Prof. Fleeming discovered penicillin while doing some experiments. The results have come out of smaller routine laboratory experiments and not of highly developed experiments. Then, how does it happen that high cost should be given to patentees' drugs etc on this score?

Mr. Harold Holloway: Many inventions may be simple and may have been discovered by chance. But the fact remains that they have been discovered. When an invention is made, it can either be kept secret or it can be exploited. One of the purposes of patents law has always been to encourage publication of the discoveries, And I think that whatever kind of invention is made, it is desirable that patenting thereof should be encouraged.

Dr. C. B. Singh: Do you agree to exceptions being made in respect of life-saving emergency drugs and inventions in the interests of the country's defence?

Mr. Harold Holloway: Yes, certainly, of the kind we have got in the present Act. It is working very well.

Dr. C. B. Singh: You have pointed out that communist countries which did not have any patent law are now gradually coming to patent law. Could you give us some explanation why they have come back to patent law?

Mr. Harold Holloway: I think they want to encourage research in their own factories in the communist, as in the western countries. I think there is also this consciousness of the need to facilitate interchange of goods in normal cause of international trade.

Dr. C. B. Singh: From your wide experience, may we have a few big examples of infringement of patent laws dealt with by your firm, especially in pharmaceutical products in this country?

Mr. Harold Holloway: Yes, we have been concerned with a number of them. A recent one, as I mentioned, concerned chloromphenicol. Most of these matters, when there are infringements, are settled as a result of negotiations between the parties. That is the only recent one that has gone to court, as far as I can remember.

Dr. C. B. Singh: Although only a small per cent of drugs and pharmaceuticals are covered by patent in this country, I have a lurking fear in my mind that a reputed firm enhances the prices like any other commodity, for example tincture, ginger etc., to make high profits.

Mr. Harold Holloway: As I have said before, people are just as greedy with regard to unpatented goods as to patented goods. There is no difference in the human greed.

Shri Himatsingka: Have you any idea as to the proportion of patented drugs to the unpatented drugs?

Mr. Harold Holloway: Our estimate is it is something like 2 per cent. We did it on our own enquiries and examination three or four years back, and nobody has scrougly challenged such conclusion. Somebody once said it was nearer 5 per cent, but if this was so, it is still a very tiny fraction. Even if it were 6 per cent, it is a tiny proportion of the whole.

Shri P. S. Naskar: Are unpatented drugs costlier, or patented drugs are costlier—as a general rule?

Mr. Harold Holloway: The general rule is, that if a drug has been costly to develop, therefore it would be costlier to buy, not because it is patented but because it proved more difficult to develop. Therefore, on the whole one would expect that patented drugs resulting from research would be slightly more expensive.

Shri Himatsinka: Even under the present law the Government have a right to have licences issued up to three years. There is that provision that articles can be protected by the issue of licence. You are objecting to that now.

Mr. Harold Holloway: I am sorry if I have misunderstood the question. What we don't recommend is this—I think it is under clause 87 whereby all pharmaceutical patents are to be marked at one as "licences of right". This is one of those considerations that would cause the Bill to run foul of, or counter to, the International Convention. They have made such patents liable to the grant of licence immediately—not after a period of time—irrespective of whether the inventor works, or is going to work, them in India or not.

Shri D. P. Karmarkar: In page 27 of your memorandum you refer to clause 5, and later you refer to clause 47 which relates to rights etc. Do you agree that so far as the advantage is concerned, clause 5 and clause 47 are satisfactory, taken by themselves—I am not referring to the impinging of the rights—do you agree that a patentee is privileged to the processed product as produced by that particular process?

Mr. Harold Holloway: I think on balance, that of it would perhaps be asking too much to expect you now to grant patent protection to products

per se. It seems, however, not only reasonable but necessary that you should continue as at present to grant protection to products when they are produced by a particular process. Otherwise these patents would be valueless.

Shri D. P. Karmarkar: Then on page 31 of your memorandum, in respect of clause 8, your principal complaint is that the work of the Patent Office will be unnecessarily overcrowded and that this provision is unnecessary.

Mr. Harold Holloway: Yes.

Shri D. P. Karmarkar: That is your only complaint. Suppose it could be managed, do you agree that a positively useful purpose will be served?

Mr. Harold Holloway: No. In all these Bills it is very easy to see afterwards that some of the information which is sought has proved not to be necessary. In another recent Bill there was the requirement that copies of the memoranda and articles of association of the parties should be submitted with each application. That produced the odd situation that in connection with one series of applications with which my firm was concerned, we were involved in the need, technically, to submit nearly a thousand copies of these memoranda and articles to a Government office. The Government office concerned accepted that they and we could not cope with a thousand such copies although the law required that we should submit five hundred copies of each. We therefore reached a compromise; we wrote and said "here are six copies of each, the rest will follow", and the Government office agreed never to ask for the others. We have sometimes to get round these provisions. It really is not, I think, sensible to insist, for example, upon specifications, and other documents, in Spanish and in half a dozen other foreign languages which we cannot translate here, being submitted to the Patent

Office. We could not cope with this, and I am sure the Controller, and all the other officials concerned would agree, that they could not examine them. One could not cope with the tremendous volume of additional information, indexing etc, while even get these papers from New York for example, would cost you a thousand rupees in postage. I do not know how any of us could cope with this, or what purpose it could serve, because every application in every other country will be examined on a different legal basis from what is now envisaged in our new Act.

Shri D. P. Karmarkar: From clause 42 you propose the omission of the words "or any department thereof". Are you aware that a department of Government is not different from Govt.

Mr. Harold Holloway: And yet it is "the Central Government or any department thereof" that is the expression used there and elsewhere.

Shri D. P. Karmarkar: Arising out of your observations on page 84 of your memorandum, with regard to public interest, as you have observed, and rightly, where the policies of Government are concerned, you have nothing to say—you may have your own private views. But situated as we are, if public interest is to be the dominant motive power behind Government's activities, though it results in loss to the patentees, do you agree that it is a progressive suggestion?

Mr. Harold Holloway: Certainly. This is why I feel it is quite outside my province. It is a fundamental policy decision whether or not you believe the public interest demands the granting of some element of monopoly. If you don't—and you are entitled not to—then, of course there can be no room for any Patent Bill. Our anxiety is that the 'public interest' is at each decisive point regarded as operating to justify the withdrawal of every effective element of advantage which should be left, and

is left, under the existing Act to inventors. Now, the balance is proposed to be tilted so much one way that I am quite confident that if you hold to this Bill, then in honesty we would have to tell some applicants. You are far better off without seeking patent which would render you liable to fines for not giving information, and which would expose you to all the burdens which we have enumerated in our introduction."

Shri D. P. Karmarkar: At page 93, of course, you have given your final opinion in paragraph 3, with regard to appeals. Suppose what you are suggesting does not happen. In that case, in view of the fact that these matters arising in respect of patent law have to be speedily decided, and in view of the fact that the High Courts are all busy with so many other things and they are not able to cope with the work, would you agree if as in the case of the Income-tax law or the sales-tax law, a tribunal would be set up with a person with some judicial experience at its head to decide these cases? In your opinion will that tribunal be found sufficient?.

Mr. Harold Holloway: Yes; I think a tribunal, particularly if it consists of a high Court judge who is accustomed to hear and weigh evidence, would be acceptable here and overseas.

Shri D. P. Karmarkar: Ultimately, in respect of what you call the advantages to be given to the patentee or the applicants for patents, taking all things into consideration including the exclusive monopoly for the thing and so on—let us leave aside delays etc. for the present—in the case of patents as a whole, what should be the effective period for which the patentee should be allowed to enjoy his rights?

Mr. Chairman: He has already said that it should be sixteen years.

Mr. Harold Holloway: Very occasionally I think it has occurred that a patent application has been accepted without any official objection. In those cases, the Patent Office could proceed to grant the patents very much more quickly than in the case of applications where there were a good number of objections raised. I do not think you can ever achieve a uniform period for the term of a patent; you may say that it should be sixteen years but some patents will take longer inevitably for a variety of reasons before they are granted.

Shri D. P. Karmarkar: You are not able to say what the minimum effective period should be?

Mr. Harold Holloway: I would say two things. A period of sixteen years would be satisfactory; ten years would be too short, because four years could be taken before the patent was granted leaving an effective period of six years only; I do not think that any of the officials would take a different view as to future grants taking a lesser period.

Shri D. P. Karmarkar: It is possible for a patent-holder in a sense to help the arranging of patents and things like that and sometimes raise the prices to more than justifiable levels. What should be the effective method to check such unconscionable rise in prices?

Mr. Harold Holloway: I think that really is outside my province.

Shri M. L. Jadhav: The cost of labour in India is lower as compared to that in other countries, whereas the cost of medicines is more than in the Western countries. Do you think that the provisions of this Bill would help to bring down the prices?

Mr. Harold Holloway: No, I do not. I think that when they start manufacturing something new—and by every standard, India is a country which is developing—then naturally it is more

costly and more troublesome, but when you have been doing so for a longer period, then the cost would come down. The other problem of course, as we are all aware, is that there is to shortage of raw materials, due to foreign exchange, and by other things, which prevents people from manufacturing always in economic quantities.

Shri M. L. Jadhav: Could you say that the profits made by the drug companies or the patentees is very high in India as compared to other countries?

Mr. Harold Holloway: That is a matter of fiscal policy. If the profits are too high, that is a matter for taxation rather than for a Patents Act.

Shri Arjun Arora: Do you have any idea of the percentage of patents being held in India which are not actually exploited in this country?

Mr. Harold Holloway: I should think that as in every other country in the world, probably a majority of them are not; that is just my personal impression.

Shri Arjun Arora: Suppose a patent is held in India and the patentee does not start manufacture in India. Do you still insist that he should have the right of exploitation of the Indian market for sixteen years?

Mr. Harold Holloway: That should not affect the period of the patent, but there should be provision whereby somebody could obtain a compulsory licence for it, as under the present Act, under which, if the patentee does not work his patent, then it is open to somebody else to go along and seek a compulsory licence, or it is possible, in certain circumstances, for the patent to be marked as "licences of right".

Shri Arjun Arora: A number of patentees are not utilising the majority of the patents held by them in India. This Bill will not affect adversely the holders of those patents?

Mr. Harold Holloway: I think a lot of them are not being worked because patentees have not yet had an opportunity to work the. Last year, there were about 6000 applications filed; in the two preceding years the number was only a little less. So, at any one time, a very large number of patents on the register, which are subsisting, are new patents, because if a patent is not being worked and is not found to be useful, then the annuities are not paid and it lapses.

Shri Babubhai M. Chinai: I have gone through what you have stated in your memorandum in regard to clauses 4 to 8, and chapters VIII and XVII. I would like you to be a little more clear than in the memorandum on one point. If Government for their own purpose say that they are going to import certain things, such as medicines etc. then it is provided that there is no infringement of the patent law. Suppose such a thing is permitted, then will you not think in terms of any compensation to the patentee? If so, kindly suggest the way or mode of payment of compensation in such

My second question is related to this. In all cases where Government allow the public sector undertakings to utilise these patents, where no compensation is envisaged under the law, will you consider the public sector undertakings which are also supposed to make profits to be on a par with other private sector projects, or will you differentiate between the two and say that compensation should be paid by the one only and not by the other, or will you say that it should apply to both?

Mr. Harold Holloway: I think many people feel that in this matter all parties should compete equally. If the public sector trading concerns are to have special advantages, then it does mean that the patentee, who may be a private party, is at a disadvantage. One of the things that strikes so many patentees as being undesirable is that under the Bill, for example,

if Government wanted typewriters that were covered by a patent and those typewriters were being produced in India by the patentee—that is to say the patent was being worked—it would still be quite open to Government to go along to somebody else and say, "You can manufacture these typewriters with exactly the same inventive features, but without any royalty payments. That results from cl. 48 and from other clauses.

It may be in the "public interest" that there should be no effective monopoly for patentees and that these extra rights should be given to this, but if that is in the public interest then that view of the matter there would not seem to be any place for a Patents Bill.

Shri Babubhai M. Chinai: May first question was not answered, whether for importing any drugs etc. any compensation should be paid to the patentee, and if so, what should be the mode of payment.

Mr. Harold Holloway: Yes these things, it is normally a matter of negotiation between the parties. I think there is also provision for settlement by the court.

Shri Vimalkumar M. Chordia: You object to compulsory acquisition of patents. If they are properly compensated, what is the objection?

Mr. Harold Holloway: I have every objection, for this reason. As I indicated yesterday, if you have an important invention and you have it patented, then it is able to be acquired by Government so that you could be prevented from using it but you have no patent then there is no risk of acquisition by Government and you would be able to continue to manufacture the item.

Mr. Chairman: If compensation is given what is the objection that is the question.

Mr. Harold Holloway: Compensation is clearly not going to be adequate be-

cause Government has said it is only going to acquire where it is cheaper to do so. That, I think, is in the "Notes on Clauses"—against cl. 102.

Shri Vimalkumar M. Chordia: You are opposed to compulsory supply of information also. Why? If the Controller requires that information, which will be kept with him, what could be the objection to supplying it?

Mr. Harold Holloway: Because the Ayyangar Report has said that it is not essential. I share that view. The "Notes on Clauses" say it is desirable for statistical purposes. Now, in the case of some of these big companies over here, big pharmaceutical companies over here, they do not know what patents of their parent companies they are using. They would have to search to discover that information, and even if they did it would not be complete, because many of the products manufactured would be unpatented. It would involve a great deal of extra and unnecessary work.

Shri Dalpat Singh: On p. 24 of our memorandum, you have raised objection against sub-clause (h) of cl. 3, saying that 'method of agriculture or horticulture' is a very wide term. What particular method do you want to be treated as invention for the purpose of patent?

Mr. Harold Holloway: This idea is not a new one. In other countries, a distinction is made between treatment of land and treatment of plants. We suggested that just as on various other points there has been a great deal of uncertainty in Indian practice, it would be desirable so as to avoid doubt, to make it clearer whether the sub-clause covered treatment of land, which we anticipate the framers of the Bill did not intend, or only the treatment of plants.

Dr. M. M. S. Siddhu: Which are the developed countries which have not process patented rather than products patented, as far as pharmaceutical drugs are concerned?

Mr. Harold Holloway: We could certainly prepare a list. The Hon. minister did enumerate 9 or 10 countries, but we excluded from that list half a dozen; as to the balance, I think we would agree. We have also told you of the position in the U.K.

Dr. M. M. S. Siddhu: I have noted from the charts in the UN publication on the subject that nearly 20 out of 64 have only product patents; the rest of them are process patented.

Mr. Harold Holloway: Yes, but I think the point there is that you also have to have regard to what is provided in the laws of those countries for infringements. They may say that a product is not patentable and that only processes are, but they sometimes go on to say that for purposes of infringement suits, the product would be regarded as protected. If desired, we could prepare a list, but I would not like to give detailed information as to all other countries without verifying the position further.

Dr. M. M. S. Siddhu: Do you think that patents regarding medicines whose widespread distribution is necessary for the immediate benefit of the community, should be made available to the community at a cost which it can bear?

Mr. Harold Holloway: Yes, that is a wonderful idea.

Dr. M. M. S. Siddhu: Do you have any information to the effect that the big cartels of the industry, specially Chas Pfizer, Cynamide, Bristol etc. have entered into an agreement with one another to keep the prices of tetracycline and broad-spectrum antibiotics very high throughout the world and if similar practices have been adopted by other firms, do you not think that administered prices brought about in such manner would adversely affect the country as a whole?

Mr. Harold Holloway: If that is occurring, it would clearly be wrong, but I do not think that a Patents Bill is the right means of rectifying such a state of affairs.

Dr. M. M. S. Siddhu: As a matter of fact they have taken advantage of patent rights to do so. That has been brought out in the Kofavour Report and also in the report of the Public Accounts Committee of the House of Commons.

Mr. Harold Holloway: That report is not concerned with India. Here we are concerned with what is happening here, namely, that the growth of the pharmaceutical industry has been phenomenal.

Dr. M. M. S. Siddhu: You said that intermediates are not being imported now. Am I correct?

Mr. Harold Holloway: To a very much lesser extent than heretofore. Previously, the companies could have made profits in three ways. They would have gained from sale of the intermediates, not raw materials, and some would have received royalties and some dividends. Today it is mainly dividends. That can be controlled by taxation rather than by any Patents Bill.

Dr. M. M. S. Siddhu: As far as tetracycline is concerned, UK was able to import it at one-tenth of the price and thereby save £12 million during two years. So, that is the position in a country with patents. Even in countries that have patents different rates exist.

Mr. Harold Holloway: If pharmaceuticals they are imported from a country where there is no patent control, no royalty at all has had to be paid and the cost of research has not had to be shared, so, they may come in cheaply, but the consequence of that would be that any such country, like Italy, would soon have no real pharmaceutical research at all. That is why in Italy you have a chemical industry which is one of the most advanced in the world but it has a pharmaceutical industry which has no major invention to its credit, since the Patent law in respect of pharmaceuticals was revoked.

Dr. M. M. S. Siddhu: I may correct you. Italy has got a good pharmaceutical industry and new drugs are coming up. Since they could not patent them in their country, they have patented them in USA and USA is going to exploit them. Therefore, to say that the countries which have no patents are not able to build a drug industry is not correct.

Mr. Chairman: That is this opinion.

Dr. M. M. S. Siddhu: But his is a fact. There is difference between an opinion and a fact.

Then, as far as drugs are concerned, you think they should not be treated different from any other inventions in spite of the fact that drugs form a way of alleviating the human sufferings while other things are not of such a direct consequence to human life?

Mr. Harold Holloway: No, Sir, That, I think, would be an extremely unreasonable position. Section 23cc of the present Act does make a very important exception in respect of medicines. We have no objection to that section, as it stands, but we agree with you that in India's present position there are special considerations in the field of drugs, but to let everybody make use of an invention before the inventor is given any chance to work the invention himself is not, according to our view, a desirable feature.

Shri S. N. Mishra: With regard to one of the points mentioned by the learned witness I would like to ask a clarification because, to my mind, there seems to be a contradiction, may be more apparent than real. That contradiction relates to the basic position. The basic position taken by the witness seems to be that the country's interest is best served by continuing the present state of affairs. If that is so, in the same breath to take up another position that before undertaking this measure there should have been another inquiry instituted, that does not seem to fit in quite well. Secondly, there are certain factors

which have taken place after 1957 which should have been taken into account before undertaking a measure of this kind. Which are those factors?

Mr. Harold Holloway: I think the answer to that is this. The Ayyangar Commission have stated in their report that they looked into the questionnaire and evidence that had been given 7 or 8 years earlier. The Ayyangar Commission interviewed only 3 witnesses, so much of the evidence which the Ayyangar Commission considered was not of even 1957 or 1958 vintage but of 1948 or 1949, as was stated by that Commission itself. So we can say that many basic points of information, particularly as to the consequences on exports, are not reflected in the Report of the Ayyangar Commission, although it is undoubtedly a very brilliant summary. Also it is not based on important events which have taken place later, so, we would have liked to have had another inquiry, if Government thought that major changes were involved, before the Bill was published. Of course, the 1911 Act cannot be regarded as being immutable. There are a number of sections that require to be modified—points like the position of joint owners, conflicts between joint owners of a patent which the Controller should be able to settle, the obvious difficulty in proving that a product has been made by a particular process and thus constitutes an infringement, for which something along the lines of section 38A(2) of the United Kingdom Acts (1907-1932) should be introduced, and so on.

Shri S. N. Mishra: So far as the justification for taking into account the various developments that have taken place during this period is concerned there can be no doubt at all. But I was simply asking whether on the same account was he justified in asking for a change of the present position when he seems to be arguing all the time that the interest of the country would be best served by continuing the present Act.

Mr. Chairman: We can discuss it amongst ourselves.

Shri S. N. Mishra: The second point relates to export. He seems to suggest that our export would be very adversely affected because of this "unique severity" as he has chosen to call it. I am not able to grasp his point fully as to how our exports are going to be very adversely affected because of this measure.

Mr. Harold Holloway: In the same way as it has occurred in Italy. If people are given licences compulsorily or independently of the patentees as "licences of right", when they try to export they will find difficulty of the kind which exactly happened in Italy. When their goods reach other countries, patents covering inventions will be found to exist in the countries to which exports are made where there is no patented invention, as in India.

Shri P. C. Borooah: The witness seems to agree that in licensing or granting patents the interests of the nation and the interests of the consumer are to be protected. Will he enlighten us as to how we can achieve these objects other than by the provisions which have been made in the Bill?

Mr. Harold Holloway: Yes, Sir; we want to avoid the cumulative weakening of the position of the patentee to such a point that protection is inadequate to justify the development and manufacture of inventions that may necessitate not only the purchase and installation of costly plant but the training of technicians. Under the protection of a patent industrial investors are ready to put up plant and to train technicians, all of which may take a certain time. I think, it is less a matter of royalty or money because many people are getting no royalty but they desire that their inventions which they have made or caused to be made should first be put into effect by them. They believe, they are entitled to some benefit for their research and

some protection for the initiation of their manufacture.

Shri P. K. Kumaran: Suppose, we do away with the patent system altogether, in respect of drugs and medicines, in India, what will be its effect on the country?

Mr. Harold Holloway: We were concerned the other day with an inquiry from somebody who manufactures veterinary products. Veterinary products are covered by one of the definitions in the Bill and experience of manufacturing veterinary products is certainly something that India needs desperately. They are awaiting are to see what happens to this Bill before they go on with their project. I do not think anybody would get out of India because of the Bill but I do think that what would happen is that people will hesitate to expand and to put in additional money and technicians of which there is a worldwide shortage, which we here all need, and which we have been doing our best in our different ways to encourage. We firms sometimes have a very hard battle to encourage people to come here and co-operate.

Shri P. K. Kumaran: Do you think that in countries like Italy, Switzerland and USSR, where the patent system does not obtain in respect of drugs and medicines, people did not invest in that industry and those countries suffer because there is no patent law in those countries?

Mr. Harold Holloway: Generally speaking, I would say that if there was not a patent system, research would be affected. You mentioned the particular case of Italy where, I think you will agree, there has been some private system of licensing and phar-

maceutical patenting being restored. Switzerland is always an exceptional case because nobody really wants to go to Switzerland to manufacture because the market is too small. The Swiss, for example, do not manufacture a motor car although they are highly industrialised. Therefore they are more concerned with the export position, so the absence or presence of patent protection in Switzerland would really be no criterion, I think, for any other country. They can only survive by manufacturing and producing for specialist export purposes, Yes and bu tourists.

Shri R. Ramanathan Chettiar: What comments have you to make on the observation made in the Monopoly Inquiry Commission's Report that continuation of these patent laws will lead to monopolistic tendencies in the drug industry particularly?

Mr. Harold Holloway: I think that the position concerning patents has been enormously misunderstood. For example, a year and a half ago it was generally thought in India that products *per se* were protected and many knowledgeable people, in the press and elsewhere, made these statements. The Monopolies Commission, with great respect, I do not think was concerned with patents; if it was concerned with patents, I think their views might have been different had they got the evidence that would have been put before an Inquiry on that point.

Mr. Chairman: Thank you, Shri Holloway.

(The witnesses then withdrew.)

(The Committee then adjourned.)

MINUTES OF EVIDENCE GIVEN BEFORE THE JOINT COMMITTEE ON THE PATENTS BILL, 1965

Monday, the 31st January, 1966 at 10.00 hours,

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Shri Peter Alvares
3. Shri Ramchandra Vithal Bade
4. Shri Panna Lal Barupal
5. Shri Bibhuti Mishra
6. Shri P. C. Borooah
7. Sardar Daljit Singh
8. Shri Basanta Kumar Das
9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
16. Shrimati Sharda Mukerjee
17. Shri Chhotubhai M. Patel
18. Shri Naval Prabhakar
19. Shri R. Ramanathan Chettiar
20. Shri Sham Lal Saraf
21. Shri A. T. Sarma
22. Dr. L. M. Singhvi
23. Shri K. K. Warior
24. Shri Ram Sewak Yadav

Rajya Sabha

25. Shri Vimalkumar M. Chordia
26. Shri D. P. Karmarkar
27. Shri B. T. Kulkarni
28. Shri P. K. Kumaran
29. Shri Shyamnandan Mishra
30. Shri Dahyabhai V. Patel
31. Shri Mulka Govinda Reddy

32. Dr. M. M. S. Siddhu
33. Shri Dalpat Singh
34. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

- I. Mr. A. G. Shah, *British Pharmaceutical Industry Association, England.*
- II. Dr. K. M. Parikh, *Zandu Pharmaceutical Works Limited, Bombay.*

1. British Pharmaceutical Industry Association, England.

Spokesman:

Mr. A. G. Shaw

(The witness was called in and he took his seat).

Mr. Chairman: Gentleman, the evidence that you give will be treated as public because it will be printed and distributed to our Members and also placed on the Table of the House. Even if you want anything to be treated as confidential, that will be printed and distributed to the Members.

We have received your memorandum and it has been distributed to all the Members. If you want to add anything apart from what is contained in the memorandum, you may please do so. Afterwards, the Members will ask you questions.

Mr. A. G. Shaw: Mr. Chairman and Members of the Joint Select Committee of the Parliament of India on the Patents Bill, First of all, may I express my deep and sincere appreciation for the honour which you have accorded to me by permitting me to attend before you this morning. The number of Members which the Parliament of India has appointed to this Committee indicates the importance which your Parliament attaches to this subject and the impartial manner in which the Parliament of India in accordance with democratic traditions deals with its important work. I am, therefore, deeply conscious of your kindness in extending to me as a member of another Commonwealth country the opportunity to speak to you about my memorandum of evidence.

As you will have seen from the preface, my name is Arthur George Shaw of 27, Moorhurst Avenue, Goffs Oak,

Waltham Cross, Hertfordshire, England I am a Fellow of the Pharmaceutical Society of Great Britain and qualified in January 1939. I am also a Barrister-at-Law and was called to the Bar in 1959.

I would explain Mr. Chairman and Members that I am not in practice as a Pharmacist or a Barrister. Indeed, although I was employed as a Pharmacist at one time I have never practised in the courts because, since 1954, I have been employed in a full-time capacity as Assistant Secretary to the Association of the British Pharmaceutical Industry. This is not a company or an undertaking but an organization which pharmaceutical companies join on their own free will. This organization, like all good organizations takes interest in all matters which concern the health and well being of the people and it has, therefore, studied with great interest the Patents Bill introduced by the Parliament of India.

As the Bill contains certain provisions which are similar to the law at present in force in Britain and because those provisions have been in use in my country in recent years, it was thought that I should submit to you the knowledge and experience which I have acquired as an Assistant Secretary of that organisation and I submit this knowledge in the belief that knowledge gained in one country may prove to be of interest and benefit to another.

As I have explained, the Association is an organisation the membership of which is voluntary. It has its offices in London. Consequently, I come into close contact with the Ministry of Health and other Government Departments and as Assistant Secretary of B.P.I., I have seen developments which have occurred in the application of the particular sections of the British Patents Act which is the subject of my memorandum. It is because

of my special position in such an organisation that I wish to offer evidence which is purely a factual statement of what has occurred.

I do not, in my evidence which I have the honour to present, offer any personal opinion. It is a statement of facts which, I sincerely trust, will be of interest and assistance to this Committee of Parliament of India in its important work.

I would like to explain Mr. Chairman and the Members of the Committee that because of other duties in my organisation, it was not possible for me to complete all my detailed enquiries before I prepared the written document which is before you. Before coming to Delhi at your kind invitation I made further enquiries to which, with your permission, I shall refer in my *expose*. In particular, I consulted officials of the Ministry of Health and the Patents Office in London as to the correctness of what I had written to you. These Officials suggested minor additions to the text and this will be mentioned in my oral evidence. During the course of my *expose*, I should like to refer to certain documents which I have brought with me. As I have come from England, I have brought the original papers which I shall be pleased to pass to the Chairman at any time if it is your wish and to leave some documents with you if that is your wish. Certain documents which I have brought are taken from our library and copies are no longer available, but if it is your wish, Mr. Chairman, I will have copies made on my return to England and send them to you.

If members of the Committee would also like copies, I will do my best to provide them on my return to England.

Shri Sham Lal Saraf: Thank you for that.

Mr. A. G. Shaw: Mr. Chairman and Members of the Committee, may

I now have your permission to take each paragraph from Sections B and C in my memorandum in turn and to comment on them and to add to the information contained therein. Thereafter, I will be pleased to answer any questions to the best of my ability which the Committee may wish to ask on my memorandum or my *expose*.

In paragraph 4 I reproduce Section 41 of the British Patents Act of 1949—in your present Patents Act under Sec. 23CC there is a similar provision. This section 23CC is not continued in the Bill but is replaced, as I understand it, by Clauses 87 and 88, which require patents for foods, drugs and methods and processes for the manufacture of foods and chemicals to be endorsed with the words 'licences of right'. These clauses also impose a ceiling rate of royalty in certain instances of 4 per cent and in this connection a resume of the decisions of the British Comptroller of Patents which I mentioned in paragraph 17 of my memorandum may be of interest to you.

In paragraph 5, the section to which I referred to does not now occur in your Bill because the new Bill requires licences to be endorsed.

In paragraph 6 you will note that I refer to the fact that before 1919 the British Patent Law did not contain any special provision for the grant of compulsory licences in respect of food and medicines but later on such provisions were introduced by Section 38A. I am informed by the British Patents Office that upto 1919 when the particular Sections were in force, there were four applications for compulsory licence under Section 38A(2).

In paragraph 7 of my memorandum I referred to a report of a Committee which led to the amending Act of 1919. The deliberations of that Committee were not published but some reference was made to them in an-

other Committee called the *Sargent* Committee which was appointed in 1929 and reported in 1931. You will note the reasons that they gave for the introduction of the particular Section.

This *Sargent* Committee which was considering in 1929 or 1930 the position with regard to this Section and the general question of patents for medicines and drugs considered a suggestion that such patents should be dedicated to the State. You will note their conclusion to which I have referred in paragraph 8 of my memorandum. You will note that having heard even in 1929 the arguments for a suggestion that patents for medicine should be dedicated to the State, the Committee came to the conclusion that no sufficient case has been made out for such a dedication and that an alteration in the law would operate adversely against the British industry and discriminate against research workers in Great Britain.

In paragraph 9 I refer to a further Committee which was set up to review the Patent Law in 1944. That Committee was called the *Swan* Committee and it published in all 3 reports, the first interim report, the second interim report and a final report.

In the second interim report the *Swan* Committee having considered the question of the special provisions for patents for drugs and medicines which then existed, came to the conclusion that such provisions could be withdrawn from the new legislation. However, in the final report, a copy of which I have got here, the Committee examined the desirability of granting what are known as product patents for chemical compounds including those which could be used for food and for medicine and if I can, Mr. Chairman, I would refer to this report and in particular to paragraph 93 of the report in which the Committee report that it has been strongly urged that

the limitation imposed on not being able to claim a patent on a substance in itself should be removed as not being in accordance with modern technical developments. The Committee said that it has been argued that the real invention lies in the discovery of a new substance with new and useful properties and that the process of manufacture often involves little novelty in itself. Many valuable new substances are produced by synthesising a large number of possible compounds by known methods and then determining of which of the new substances have useful properties.

Having looked at this argument put before them this Committee which reported in 1947 said as follows in paragraph 95:

"We are impressed by the arguments which have been advanced in support of the proposal for removing this limitation on the claiming of new substances produced by chemical processes and we recommend this limitation be repealed.

Mr. Chairman: Is it the final report of the Swan Committee?

Mr. A. G. Shaw: This is the final report which I will be very pleased to give you if you so like.

Mr. Chairman: Please give us a copy.

Mr. A. G. Shaw: Having decided that a product patent should be granted in respect of a chemical substance the Committee looked at the difficulty of distinguishing between chemical substance which can be used for purely chemical purposes and which can be used for foods or a medicine. They found that it would be difficult to distinguish between a chemical which can be used for one purpose and one which can be used as a drug or a medicine or in the production of a drug or a medicine. And, therefore, recommended that the conclusion in the second document which stated

that the special provisions concerning food and drugs might be withdrawn, should be withheld, and consequently this finely balanced decision has resulted in carrying forward into our present Act of 1949 the special provisions for food and for drugs. Now in paragraph 11, I explain section 41 of our present Act continues the special provisions of this earlier legislation. I also point out that the section is not applicable to other classes of inventions and in order to seek a compulsory licence for an invention that is not a food or a medicine or a surgical or curative device, it is necessary for an applicant to proceed under another part of the Act, Section 37. Now Sections 37 and 41 differ in a number of important respects and for an application to succeed under Section 37, it is necessary to show some abuse of monopoly on the part of the patent-holder. The various reasons which an applicant can advance under Section 37 are set out in greater detail in the appendix to my paper, but I have instanced one or two examples in my paper which are perhaps most important.

Further, I also point out that no proceedings can take place under Section 37 until three years have elapsed from the date of sealing; but in the case of Section 41, applications may be made at any time.

I now turn to reviewing the applications which have been made under this Section of the Patents Act passed in 1949. Here, Mr. Chairman, there are certain corrections which have been made to the figures. With your permission, I will now read from my expose so that I can give you the latest information which was kindly provided by the British Patents Office before I left. Between 1949 and 1965, there have been 45 applications made under Section 41 of the Patents Act. Of these, 40 related to medicine; one application is classified by the Patents Office as surgical or curative device;

and four related to food. The years in which the applications in respect of medicine were made are correctly set out in the table which is reproduced in paragraph 14. At the end of 1965, the position with regard to these applications is as follows: in the case of medicines, where there was a total of 40, nine have been granted, none has been refused, 17 have been withdrawn and 14 were pending waiting attention by the Patents Office and the comptroller. The one application which was submitted for a surgical or curative device was withdrawn, and the four applications submitted in respect of foods were refused. Now in the case of medicines, where there were nine licences granted, six applications were subsequently withdrawn . . .

Shri R. Ramanathan Chettiar: For what reasons?

Mr. A. G. Shaw: The applications were abandoned, Mr. Chairman, as I understand it, because having examined the possibility of placing the particular drug on the market, the company, which was granted the application, was not satisfied that it would than be a commercial proposition to do so. This was the information given to me before I left London.

In para 16 of my memorandum, I say that of the licences which have been granted, only three are in force at the present time and royalty rates have been determined in respect of those licences.

Referring to paragraph 17, in the second case which I mentioned, i.e. Biorex Laboratories Ltd. and J. R. Geigy S.A., the Comptroller ordered a royalty of 16 per cent. But this was increased to 18 per cent when the matter was taken on appeal to the Patents Tribunal. The figure which I have quoted of 18 per cent is operative royalty, but I wish to explain that it was 16 per cent with an additional 2 per cent added to it to make a total of 19 per cent.

I would now like to refer, Mr. Chairman, to comments made by the

Comptroller in giving his decision in these first two cases. This is a copy of the decision in that case. It is at your disposal if you wish to see it later, Mr. Chairman. As the committee will note, the terms of section 41 provide that the Comptroller shall grant an application unless it appears to him that there are good reasons for refusal. In giving his decisions, the Comptroller examined what might be accepted as good reasons for refusing an application. The reasons included the need for him to satisfy himself that the applicants were capable of manufacturing the articles in question and possessed full knowledge and equipment for the purpose. Unless he was so satisfied, he would not feel inclined to grant the licence. In examining the facts to be taken into account, in assessing the amount of royalty which should be awarded, the Comptroller referred to this matter as an extremely difficult and complicated question, particularly in reference to drugs and medicines. However, he took the view in coming to his decisions—which as I have explained were 15 per cent in one case and 16 per cent originally in the other case—that the licensee in his royalty payment must make a contribution to the cost of research which led to the discovery and development of the new drug and medicines and also to the cost of the work which the inventor had had to carry out in order to demonstrate to the medical profession the value of the product in the treatment of disease. There are appropriate references to his remarks in the document which I have brought with me.

Now, I turn to other developments which have occurred in connection with section 41 of the Patents Act. As you will note certain companies which have submitted applications under section 41 of the Patents Act have offered for sale to chemists and doctors medicines which are the subject of a patent. In many of these instances these products were being imported from abroad and they were offered for sale and in that way, at that time, it

was contrary to the law, and that was why, as I have explained in paragraph 19, the patent-holders challenged the sale.

Then, the companies submitted applications under section 41 and said that having submitted an application under section 41 they were then entitled, although their applications had not then been heard, to import the drug and to offer it for sale to chemists and doctors.

Some of the products to which reference is made in this paragraph were examined by Mr. F. G. Stock at the City of Birmingham Analytical laboratories. Mr. Stock is an independent analyst who is employed by Birmingham City just as he might be employed by the corporation of Delhi (?). A report published in the Pharmaceutical Journal gives a survey of his findings. I have brought with me an extract from the report of the Pharmaceutical Journal which again if it is your wish I am very willing to leave with you here or of which I am prepared to have additional copies made in England and sent on to you.

In his report, Mr. Stock draws attention to some deficiencies in cheap drugs. While some of the samples which he examined were quite satisfactory, others were badly prepared and showed marked deterioration in potency when he examined them. In one case quoted by Mr. Stock, the deficiency was very high; the various samples of the same product which he examined showed deficiencies which ranged from 57 per cent to 73 per cent in the potency of the product.

Mr. Stock makes the comment that these products were badly prepared and badly formulated; by 'badly formulated' I mean that they were not correctly compounded in the best way. The product in question was drops intended for administration to small children it was prepared in a liquid form for convenience to administer by a dropper to small children. They had not been correctly prepared. The material according to Mr. Stock tended to stick at the bottom of the bottle,

and, therefore, when he examined the product, it showed these large deficiencies. I shall leave with you the extract from the Pharmaceutical Journal if you require it.

In paragraph 19, I have already mentioned that these drugs which had been imported were coming from unlicensed sources and were the subject of patents held in Great Britain. Therefore, the companies which held the patents challenged the action of importing the products.

In paragraph 20 I point out that this matter went to the Court of Appeal in London, and it was held that the fact that an application had been submitted under section 41—not examined or a licence granted—was not of itself any reason why the court should refuse to grant relief to the patent-holder by way of an injunction which would restrain and stop the company offering this imported product for sale. Accordingly these injunctions were granted and the company was prevented from importation and sale.

In giving that decision, which I have with me, these reasons are set out in the copy of the judgment there. Since this decision was given, a number of applications which have been submitted under that section have been withdrawn. This refers to the figures which I have mentioned in my earlier report. Now, of course, it is not possible to say that the sole reason for the withdrawal of these applications in 1965 was a decision given by the Court of Appeal. But as many of the applications which have been submitted recently under section 41 are for the importation of products rather than for manufacture in Great Britain, I think that the decision must have had some consequence in those withdrawals.

In section VI I explain the views of the British pharmaceutical industry on this subject. It is purely factual, and I draw your attention to the rapid increase in the number of applications which has occurred in recent years and which is set out in the table in paragraph 14.

This caused serious concern to the pharmaceutical industry in Britain because it was evident that many of these applications were being made for the importation of drugs and the Association of British Pharmaceutical Industry as representing pharmaceutical manufacturers in the U.K. made representations to Her Majesty's Government requesting that the section be repealed. Here is a copy of the actual memorandum reproduced as an extract from the journal, which I shall be pleased to leave with you if it is of interest to you or to the Members of your Committee.

In paragraph 24 I draw attention to some of the principal arguments which have been advanced why the section should be repealed. The reason is that it discriminates unfairly against the pharmaceutical inventor by not providing comparable protection to that afforded to holders of patents of other articles. In his decision, when he examined the question of royalties, to which reference is made in the document here, the Comptroller said that many substances had to be made and examined before it could be found that a particular one was of value in the treatment of disease and of value to humanity. Therefore, this is one of the reasons why the association suggests that the inventor of a new drug is no less worthy of the praise and patent protection of the country than the inventor of some mechanical device.

I also point out in paragraph (b) the benefit to the health of the nation and to its economy which follows from research and discovery by the pharmaceutical industry in Great Britain. In this connection, I would like to draw your attention to the views expressed by a Government Committee appointed in 1959 which investigated the cost of prescribing in the National Health Service. This Committee, which is called the Hinchliffe Committee—with your permission, Mr. Chairman, I would like to quote the relevant paragraph and the document is available to you and the

members of the Committee—in paragraph 258 of its report under the heading "Conclusions on research"—I will read out only those conclusions which relate to the pharmaceutical industry and to the production of new medicines—says:

"Our investigations into the research activities of the British Pharmaceutical Industry led to the following conclusions:

The pharmaceutical firms which do research are making a valuable contribution to the National Health Service. Such research is essential for advances in therapeutics. The costs of research on therapeutics and prophylactics product are considerable but no higher than in other countries making comparable effort. Firms should be encouraged to increase their research effort. The conditions which favour profits for research such as patent rights, publicising of proprietary names and the price agreement with the Ministry of Health should be accepted. No changes in the organisation of pharmaceutical industry should be recommended without a detailed enquiry as we have been able to make."

A little later on, towards the end of my memorandum I will draw your attention to the fact that such a committee has recently been appointed in the United Kingdom.

Mr. Chairman, with your permission, I would now like to turn to section 'C' of my paper which deals with section 46 of the United Kingdom Patents Act, 1949. I now turn to that part of the memorandum which is concerned with the use of patents by government departments which generally correspond to provisions of section 48, section 99 and section 100 of your Bill.

Sub-section (i) of Section 46 of the British patents Act is the relevant section under which the Ministry of Health imported drugs from abroad

for the hospital services. Clause 100 of your Bill contains similar though somewhat wider provisions than in section 46. The principal of 'government use' is taken much further by clause 48 of your own Bill.

In paragraph 26 I refer to one case which has been heard in various courts in England, concerning government use, in order to establish whether the provision of drugs for the hospitals, which is a social service, can be considered as coming within the services of the Crown and the use of section 46. The point I wish to make in this paragraph is this. In the judgment in one of the cases, which may be of interest to you in relation to clause 48 of your own Bill, there is a comment which defines a government undertaking. In his judgment, Lord Reid—I have here a copy of the Judgment which I shall be pleased to leave with you—said:

"But I think that it is now well recognised that by reason of the structure of their organisation the nationalised industries, for example are not services of the Crown."

I now turn to paragraph 28—Paragraph 27 is merely an explanatory paragraph. It would be more explicit if it read: "On the introduction of the National Health Service in 1948, individual hospital authorities were given general responsibility to paragraph. It would be more exact for the purchase of pharmaceutical products for use in the hospital service." I did not intend to infer that this was a power that was only given to hospitals when the National Health Service was introduced; the hospitals always had the power to purchase their own requirements. I mentioned that in general the responsibility rested with each hospital authority and that central contracts were only made for special drugs. Examples of where central contracts were made is in the antibiotics such as penicillin when they were first introduced and were in short supply, or

cortisone or similar materials when they were first made in the United Kingdom and their supply was very short with the result that the Government had to enter into contract with the manufacturers to ensure that the supplies went primarily to the hospital services.

Shri K. K. Warior: Do you make any distinction between private hospitals run by private people and government hospitals under this law?

Mr. A. G. Shaw: There are very few private hospitals now in the United Kingdom. Practically all hospitals are now controlled by the National Health Service. There are very very few indeed and I think for general purposes they may be ignored with regard to the question of application of this section.

Shri R. Ramanathan Chettiar: What about some of the infirmaries?

Mr. A. G. Shaw: Infirmaries and hospitals were all taken over by the National Health Service in 1948 and were vested in the Ministry of Health. They all form part of the National Health Service.

In paragraph 29 I drew attention to the fact that several reports appeared that hospitals were achieving all savings by purchasing drugs from unlicensed sources outside the United Kingdom. This clearly created difficult problems because of the uncertainty of the position as to whether the Government's use of section 46 extended to individual hospitals.

This again is amplified in paragraph 30 in which I say that subsequently Mr. Enoch Powell, who was the then Minister of Health replied to a number of parliamentary questions announcing his intention to use section 46. In 1961 he stated that he proposes to use section 46 to obtain certain drugs and he gave instructions that individual hospitals themselves were to stop purchase of drugs from abroad. The hospitals originally were pur-

chasing the drugs from abroad. When the Minister of Health stated that he was going to use section 46, he told the hospitals to stop purchases because he, as the Minister of Health, will arrange to get those drugs by using section 46. So, the hospitals stopped buying these drugs from abroad.

Mr. Chairman: And the UK Government took the responsibility of supplying these drugs?

Mr. A. G. Shaw: Yes.

The point I was making there was that the Minister himself decided that he would use the powers to supply the hospitals and the individual hospitals stopped purchasing themselves.

Mr. Chairman: Those powers exist even now?

Mr. A. G. Shaw: Yes, but they are not being used now. The Minister is no longer using those powers.

Mr. Chairman: But they have not been revoked?

Mr. A. G. Shaw: No. The fact remains that at the present time the Minister has stopped using them. He used them from 1961 to 1965, for a period of four years. Now he has stopped it.

Shri K. K. Warior: When the Minister took action no hospital raised any objection to it?

Mr. A. G. Shaw: No, because the Minister himself is responsible for the provision of all hospital services under the National Health Service.

In paragraph 31 I explained that the Ministry of Health announced that they proposed to invite contracts for the supply of certain drugs to the hospitals. The drugs which were supplied came from manufacturers outside the United Kingdom and none of the companies which were

awarded these contracts was a patentee or licensee. They were coming from unlicensed sources. The drugs in question came mainly from Italy and were supplied through small companies which imported them from that source.

In paragraph 32 I explained, as I have already said, that this action was continued until 1965. Although there was some change in the companies which were awarded contract by the Ministry of Health and some changes in the countries from which these drugs came, they all came from unlicensed sources.

In paragraph 33 I go on to state that the Minister of Health announced, before taking any further action to continue the contract for a further period that he had invited patentees and licensees in the United Kingdom to quote for the supply of these drugs for the hospitals and armed services. He also gave the same invitation in respect of three other patented drugs which are widely used in hospitals. Subsequently, in Parliament the present Minister of Health, Mr. Kenneth Robinson made a statement with regard to the use and purchase of drugs under section 46. You will note that he says that with two exceptions satisfactory arrangements have been made, with manufacturers and that, therefore, he would negotiate prices with manufacturers in the United Kingdom who were the patentees or licensees of the drugs in question.

In paragraph 35 I stated that subsequently satisfactory arrangements have been made with the patentees or licensees of the two outstanding drugs to which he refers earlier and, consequently, now, as I have mentioned, no purchases of drugs are being made from unlicensed sources under the authority of section 46(1) of the Patents Act, 1949. There has been no formal announcement of this but this decision was conveyed to my Association in a letter from the Ministry of Health, of which I have a copy and

in order to substantiate the statement which I have made, I have brought a copy of the letter for you to see, if you so wish.

Shri R. P. Sinha: Will you kindly read that letter?

Mr. A. G. Shaw: I will read it. It is addressed to Mr. Duckworth, who is the Secretary of my Association, my superior officer. It is from the Ministry of Health. It says:

"Dear Duckworth,

You wrote to Mr. Hunt on 3rd December about the supply of drugs to hospitals under section 46(1) of the Patents Act, 1949. Satisfactory arrangements were made with the patentees or licensees of the two outstanding drugs, chlorothiazide and hydrochl rothiazide. This means that there are now no purchases of drugs being made under the authority section 46(1), but the Minister said in a written answer to a parliamentary question on 21st June last that he would continue to use his power under this section as and when it seemed to him right to do so."

Mr. Chairman: So the section is there.

Mr. A. G. Shaw: The section is there. The Minister says he would continue to use section 46(1) if he thought it were necessary to do so. One could not expect any Minister to make any other statement. The Act is there on the statute book, it gives him powers. Therefore, he must say that he will use the powers which the Parliament has given him, if he thinks it is right and in the interests of the nation for him to do so.

Shri K. K. Warrior: There was no instance of any import under section 46(1) after that statement in Parliament in June?

Mr. Chairman: The power was there.

Shri K. K. Warrior: Were there any instances of any import?

Mr. Chairman: The patentees came to terms with him. You may continue, Shri Shaw.

Mr. A. G. Shaw: In the reply given by Mr. Robinson he refers to drugs used in the pharmaceutical service. I think, it would be helpful if I explain this term and why it differs from "the hospital service". The pharmaceutical service to which Mr. Robinson refers is the supply of medicines to National Health Service patients through the retail chemist when they have consulted the doctor in his surgery or when he has visited them at their homes. When he visits them at their homes or when they go to his surgery, if they require medicine, he will write a prescription and they take the prescription to the chemist who makes up the medicine and then gives it to the patients.

Shri D. P. Karmarkar: This service also is a part of the National Health Service.

Mr. A. G. Shaw: Yes. The National Health Services extends to hospitals and also to the doctors in relationship with their patients at home as also to the welfare and clinic services for mothers and young children. This is all part of the National Health Service in the United Kingdom. If I could just interpose an example, before I came to India I had to have some inoculations. Before I came I went to see my doctor as a National Health Service patient and I received the inoculations as part of the National Health Service in Great Britain.

Shri Bibhuti Mishra: Is Health Service compulsory for all people?

Mr. A. G. Shaw: The Health Service is not compulsory in the sense that you need not take advantage of the Health Service if you do not want to. If you want to employ a private doctor, you can employ a private

doctor and pay him; but if otherwise you want to use the National Health Service in Great Britain, it is there for you to use as a citizen of Great Britain.

In referring to the pharmaceutical service, which I have explained what I mean by pharmaceutical service, the Minister refers to negotiations of prices. By this Mr. Robinson refers to the voluntary prices regulation scheme, a copy of which I have here, which regulates the prices of branded prescription medicines when supplied through chemists to the National Health Service patients. This scheme was entered into voluntarily by the pharmaceutical industry in Great Britain with the Ministry of Health. The purpose of this scheme is to establish that the prices charged by the manufacturers are fair and reasonable. It was negotiated first in 1957, again in 1960 and the last agreement was made in 1964.

Mr. Chairman: What is the organisation?

Mr. A. G. Shaw: The organisation which negotiates it with the Ministry of Health on behalf of the pharmaceutical industry is the organisation of which I am an assistant secretary. I should add that this agreement does not apply to the hospital service, but this is for historical reasons. This agreement was originally negotiated following recommendations by a committee which was concerned with the supply of branded prescription products by doctors for National Health Service patients. The present scheme is complex and complicated as one might expect in dealing with such a diverse range of products and a diverse industry, but I should like to mention to you four important points in connection with this scheme.

Firstly, as I have mentioned, the scheme applies to prescription products only; it is not concerned with the prices of medicines for which the public may wish to go to the chemist or anywhere else and purchase for them-

selves as an individual. It is only concerned with the prices of branded prescription products which are supplied on prescription and which are paid for by the National Health Service.

Secondly, the price control which is applied by this scheme does not apply when a new product is first placed on the market. A new product when it comes on to the market has a freedom from price control. This freedom period extends for two to four years according to the amount of original research that went into the discovery and development of the medicine. If a lot of research has gone into a product, it has a longer period than one which is a formulation.

Thirdly, after the freedom period has expired, the price of the product is determined by various methods in which export sales are taken into account. This is an important point because a part of the scheme is to encourage the industry at home to export its sales and if it has a good export performance, it has better treatment under the scheme.

Fourthly, if a product has a very large use for the Health Service, the Minister has the right to enter into separate negotiations with the company and also if the manufacturer himself wishes to negotiate directly without recourse to the scheme, he can go to the Ministry of Health and do so. All members of the organisation by whom I am employed have agreed to accept this scheme voluntarily and not to increase prices without the approval of the Ministry of Health.

Shri Bibhuti Mishra: What is the difference in the export price and the internal use price?

Mr. A. G. Shaw: That I cannot answer.

Shri R. P. Sinha: Will it be possible for the witness to supply this information later; or, he would not like to do that?

Mr. Chairman: You can ask the question later. Let him finish his evidence.

Mr. A. G. Shaw: The present scheme will last for three years and may be continued unless either side gives six months' notice to terminate the agreement. That is all I want to say at the moment about the particular scheme.

I turn now to section 4, which is the legal proceedings arising out of the use of section 46.

I may merely summarise that sight of the Minister of Health to exercise powers in relation to supply of drugs to National Health Services hospitals was challenged.

In 1961 proceedings were commenced which did not terminate until 1965 when there was a decision by the House of Lords. You will know that the House of Lords is, however, the highest court in England. You will also note that the decision of the House of Lords in this case was not unanimous but was reached by a majority of 3 to 2.

In his speech whilst he was delivering his judgment, a copy of which I have already given, one of the judges said that the acceptance of the principle of Crown use for the National Health Services hospitals seemed to be alarmingly wide and to be a formidable incision into the rights which the Crown had granted. His views were endorsed by another member of the Court.

Now, under Sec. 5, I set out the views of the British Pharmaceutical Industry, on the use of Section 46 and the reasons why they have been concerned on the importation of drug from unlicensed sources because of the effect which it can have upon the research and development in the U.K. In particular, they are concerned that if these importations continue on the products which are the most popular and in the greatest demand, it will

take away the ability of the company to carry out adequate research in the U.K.

Now to paragraph 43 I draw attention to some views which have been expressed by the Patent Advisory Committee of my Association and I can now say that that has been approved by the Association for incorporation into the evidence which they will submit to the Committee recently appointed by Government to enquire into the relationship of the Pharmaceutical Industry and the National Health Service.

The Committee, which was appointed in 1965, is known as the Sainsbury Committee. You will note that except when the Section is to be used for defence purposes, here it is recognised that there is an overriding priority, it has recommended that there should be an enquiry to establish such use of the section by Government in the interests of the national economy and the nation's health. The procedure suggested is similar to that which the British Parliament has accepted for the compulsory purchase of land.

You will note that one of the considerations which it is suggested should be taken into account is whether the use by the Government of this Section is likely to discourage manufacture or research in the U.K. In this connection, and it is relevant in relation to Section 41, to draw attention to the results of surveys carried out on expenditure by the pharmaceuticals industry association from time to time. The following figures which are readily available are for the years 1956—1963. They are:—

	(In £ & \$)
1957	.. 4.2
1958	.. 5.1
1959	.. 6.3
1960	.. 7.5
1961-62	.. 7.8
1962-63	.. 8.3

This is the latest information which is available at my disposal. From this, it can be seen that in the recent years for which the figures are available, the rate of expansion on expenditure on pharmaceutical research in the U.K. has not been maintained. One might assume from these figures that the use of Sec. 46 and 41 must influence the owner of any company in deciding upon the amount of money which one can devote upon research for new medicines.

Dr. M. M. S. Siddhu: In this connection, can Mr. Shaw tell us as to whether there has been any change in the position of the British Pharmaceutical Industries as a result of the American subsidiaries having taken over the British industries and consequently the research being carried out in America?

Mr. Chairman: You can ask this question at the end after he finishes his evidence. Please note down the points. You can ask him later on. Mr. Shaw, you may continue the evidence.

Mr. A. G. Shaw: Mr. Chairman, this is the expose which I wish to give. I am sorry to have taken so much time of the Committee. I am grateful to you and the Members of the Committee for your patience which you have shown to me in making this expose.

Shri R. Ramanathan Chettiar: May I ask the learned witness one question? During the course of his observations, he mentioned that out of 9 licences granted (patent rights) in the U.K. under Sec. 41, as much as 2/3rds (6) were abandoned.

Mr. A. G. Shaw: Yes, Sir. Nine were granted of which six were abandoned.

Shri R. Ramanathan Chettiar: Can you explain the reasons that impelled the manufacturers to come to the decision in abandoning those six?

Mr. A. G. Shaw: Those applications were for separate patents which related to licences to deal with a particular material. I have already explained earlier that the company decided after a careful consideration not to use them as a commercial proposition.

Shri R. Ramanathan Chettiar: In the U.K. there large cartels (syndicates) in the pharmaceutical drug industry.

Mr. A. G. Shaw: Yes, Sir.

Shri R. Ramanathan Chettiar: If you really analyse the worldwide organizations of the pharmaceutical industry, I think it is not more than 200. After all, about six or seven are cartels or syndicates that operate in the U.K. So, don't you think that these patents rights given to such cartels will lead to monopolistic tendencies?

Mr. A. G. Shaw: I don't think so because there have been few applications under Sec. 41 of the Act. The reason why there have been few applications is as follows:—

First of all, the manufacture of chemicals and medicines is very complex and a costly process and requires much complicated equipments and plants. Before applying for a licence, a company must be satisfied that it has got equipments and plant in order to carry that out. Having done so, it has also to be satisfied that it can establish a suitable market for the drug in the U. K. Then, it has also to be satisfied that it has the know-how in order to prepare a product of the correct standard and to offer it in the correct form which is required for the patient.

For a pharmaceutical product you might have to manufacture a chemical and then you have to convert it into an appropriate form in which it has to be administered.

Shri Vimalkumar M. Chordia: Please see para 14 of your memorandum. There you say only 4 applications were given for compulsory licence and none was accepted. May I know what are

the reasons that only 4 applications were given and even they were not accepted?

Mr. Chairman: That has been modified. He has said that 47 applications were made.

Shri Vimalkumar M. Chordia: It has been modified. He said that only 4 compulsory licences were given for food and not a single one was accepted; all were refused.

Mr. A. G. Shaw: They were refused because as I understand the reason—I have not got the decision of the Comptroller with me here—they were going to import those foods into the U.K. Sec. 46 is Govt's use and Sec. 41 is other than Govt's use where one can apply for a compulsory licence and these applications for food, as I understand it, were for the importation of the particular food into the U.K. and these applications were refused. I have not got the details of that judgment with me. If you like, on my return to England I will look into the question and obtain further information.

Shri Vimalkumar M. Chordia: Please refer to para 35. There you say that the Government have made satisfactory arrangements with the patentees or licensees of the two outstanding drugs and, consequently, no purchases of drugs are now being made under the authority of Sec. 46(1) of the Patents Act 1949. May I ask: was it possible for the U.K. to reach those arrangements without previously using the power of importing of patented drugs and products?

Mr. A. G. Shaw: Undoubtedly they used Sec. 46. But as I explained the Ministry of Health is negotiating with the manufactures both in relation to the prices which are to be charged to hospitals and also in relation to the royalty payments which have to be made. At the present time these negotiations have not been completed. So I cannot, nor indeed can I expect to have any information about the prices because these are confidential

between the Government and the manufacturer.

Shri Bibhuti Mishra: Is there any difference in the prices that are charged to hospitals and those charged to private persons?

Mr. A. G. Shaw: Very few private people get their medicines to-day because all the people or a very large proportion of people in U.K. obtain their medicines through the National Health Service. Very very few people buy the medicines themselves.

An hon. Member: What is the difference between the retail prices and the hospital prices?

Mr. A. G. Shaw: As I understand the question I have no information about the prices which have been agreed to by the Ministry of Health for these contracts. This information is confidential between the Ministry of Health and the contractor.

Shri Vimalkumar M. Chordia: What is the attitude adopted by the other industries in the U.K. to the use of Sections 41 and 46?

Mr. A. G. Shaw: The reply to that, Mr. Chairman, is that other British industries have submitted memoranda of evidence to the Sainsbury Committee. Towards the end of my address I mentioned that the Government have set up a Committee of Inquiry to go into the relationship of the pharmaceutical industry and the National Health Service. This Committee is called the Sainsbury Committee. The confederation of the British Industries which represents all British Industry has sent a memorandum to the Sainsbury Committee in which it supports the suggestion that the discrimination put forward in Sec. 41 should be removed and that also the use of Sec. 46 to provide articles for such purposes as National Health Service should be reviewed. So, in general, the views which I have expressed in my document consisting of the views of the industry on Sec. 41

and 46 have been endorsed by other British industry.

Shri A. T. Sarma: In your statement you have said that even a single supplier supplies drugs or medicines in various rates and prices vary from one supplier to another.

Mr. A. G. Shaw: Could you mention the paragraph in my document?

Shri D. P. Karmarkar: If I may put it correctly, is it not a fact that the negotiated prices do not apply to any private doctors who would like to prescribe medicines? Differentiation of prices is as between the negotiated prices.

Mr. A. G. Shaw: I think I understand the question. I must apologise to the questioner for not understanding it at the first time. These prices which are agreed to by this National Health Scheme will determine the prices at which the manufacturer will supply to the chemist and for the National Health Service it is the same price. There is no difference in the prices charged to the chemist for the product whether it is for the National Health Service or whether it is supplied on a private prescription. But as I have explained there are very few people who obtain private medicines to-day; they all use National Health Service. But if they do obtain the medicines through their chemists and pay for them, the basic price of the medicine which they would obtain would be determined by this Scheme.

Shri A. T. Sarma: In paragraph 14, you have given a statement showing the number of applications submitted. But the number of applications is very small. Even out of that number, 13 have withdrawn their applications and others are pending. What is the use of having Section 41 if there is no use of it.

Mr. A. G. Shaw: I tried to explain a little earlier why there had been so few applications under Section 41—

that you have, in fact, to be satisfied that you have the requisite plants and the capability to manufacture; you have to be able to satisfy that you have the know how in order to prepare the product and to prepare it in the proper form.

Dr. M. M. S. Siddhu: Referring to the expenditure on research, may I know what is it as a total percentage of the sales, and secondly, what percentage of the amount the pharmaceutical industry has been spending on sales promotion and advertisement?

Mr. A. G. Shaw: The amount which the industry spends on research in Great Britain in relation to its sales to the National Health Service is about 10% and it spends about the same amount of money on sales promotion.

Dr. M. M. S. Siddhu: I want to know it in respect of the total sales.

Mr. A. G. Shaw: It is difficult to relate it to total sales because the total production of the industry, which is about 200 million pounds, includes many things which are sold as medicines over the counter to the public and also veterinary medicines.

Dr. M. M. S. Siddhu: Mr. Brian Inglis in his book "Drugs, Doctors and Deaseses" surveying the pharmaceutical industry, says (on page 102) that "research and information are not services which the pharmaceutical manufacturers provide at great trouble and expense simply for the benefit of the medical profession and the community. Both are basically promotional activities indulged in at great cost because of the still greater returns." May I know whether the observation is correct?

Mr. A. G. Shaw: Mr. Chairman, I have not dealt with this aspect of sales promotion expenditure of the pharmaceutical industry in my brief and I would like to have a further opportunity of studying it. I do not wish to give a quick answer to this

question concerning the extract taken from a book I would most welcome the opportunity of taking the question and giving you a written answer.

Dr. M. M. S. Siddhu: What, in your opinion, is the life span of modern drugs which are being produced these days? After how much time they are not being prescribed?

Mr. A. G. Shaw: Again, Mr. Chairman, these are questions which come outside my memorandum. I came here to talk to you, if I may say so, about sections 41 and 46 and if there are questions outside my brief for which the Committee would like me to give an answer, by all means I would write them down, take them back with me and study them. I have not come prepared in my brief to deal with these questions.

Dr. M. M. S. Siddhu: You may please think over and give us replies afterwards.

Mr. Chairman: You can study them and send your comments afterwards.

Mr. A. G. Shaw: I think it would be better and preferable to the Committee, if they wish me to study something which is not in my brief, to give those questions to me before I leave and allow me to study them.

Dr. M. M. S. Siddhu: What has been the impetus on research programmes in those countries of Europe where the process for the product is patented. It has been made out that if the product is not also patented along with the process, then then research promotions do not get the impetus. There are countries in the Continent where the process is patented and not the product. What is the research programme of those countries as compared to U.K.? You may give the answer after your return.

Mr. A. G. Shaw: Again, these are questions which I would like to have

an opportunity of taking away with me and studying them. I am very willing to help you, Mr. Chairman, in every way I can. I do not think it would be desirable for me to give answers here without information.

Dr. M. M. S. Siddhu: It is stated here in the same book (page 102) that "with the pharmaceutical industry established internationally on a cartel basis and protected by patent laws, such a competition can be minimised. I may add that Cyanamide Pfizers, Bristol and Parke Davies have their subsidiaries in England and one reason why the research programme of England suffers is that these subsidiaries instead of doing research work in London or England are doing it in Washington and New York.

Mr. A. G. Shaw: Equally I may say in turn, Mr. Chairman, that these companies have established themselves and are manufacturing in the United Kingdom for so many years and the British public gets the benefit of the research which is carried out in other countries.

Shri R. P. Sinha: I would like to know what has happened to the memorandum that you submitted on Section 46 for its repeal. Are you satisfied with the letter from the Minister of Health or are you still pursuing for the repeal of that section?

Mr. A. G. Shaw: They have appointed a committee of enquiry and in its submissions to this committee of enquiry, the Association will suggest, as I have pointed out in my memorandum, that consideration should be given to the method of use of Section 46. I have explained that in my memorandum.

Shri R. P. Sinha: Do you think that the repeal of section 46 as suggested by you will be in the national interest of UK?

Mr. A. G. Shaw: I think that it will be in the national interest of England because, in fact, we are not suggesting that the section should be done away with but we are suggesting that the section should in the first instance, be retained primarily for the purpose for which it was introduced into the legislation, that is, for the Armed Services and the defence of the realm. We freely admit that section 46 must be there to enable a Government Department to exercise an invention for the defence of the realm. What we suggest is that before a Government Department would use section 46 to purchase drugs for hospitals, there is an enquiry in which the company concerned can state its case and state its objections. And when there has been enquiry there can be a report and on the basis of that report action can be taken, and we wish to suggest that the whole aspect of the national interest, of the effect on production and the effect on exports and so on is taken into account.

Mr. Chairman: National interest should be of prime importance?

Mr. A. G. Shaw: National interest is whether it is going to assist in research in the country, whether it is going to assist in growth of the industry in the country and whether it is going to assist in the promotion of exports from the U.K.

Mr. Chairman: Do you agree that national interest should be of primary importance in deciding these matters?

Mr. A. G. Shaw: These we consider to be in our national interest; the growth of the industry is national interest.

Shri R. P. Sinha: I would like to seek a further clarification on one point regarding the views of the association. Suppose the pharmaceu-

tical industry England, in spite of the agreement that they have got with the Health Ministry with regard to the prices, cannot reduce the prices to bring them on par with the international prices in the case of a certain drug or pharmaceutical product; suppose in respect of a product A, the international price is 50 per cent or 30 per cent lower than the British prices of that particular drug; would you like the Health Ministry to enforce section 46 and compel the industry to reduce the prices? If this particular drug or product could be sold at a cheaper price in the world, then national interest does demand that you should so improve your research and production processes that you could also give the item at the correct price.

Mr. A. G. Shaw: I think the answer is that we have an effective pharmaceutical industry established in the U.K., and we would hope to be able to produce our drugs at competitive world prices. Indeed, our industry exports about 30 per cent or 33 per cent of its total production. I think that shows that the industry is effective and is competitive with the world prices.

Shri R. P. Sinha: Previously, before section 41 came, it was found that the patents were mostly used for purposes of foreign patent-holders to import their products into the U.K. The patent law had been revised in order that new industries could be put up to manufacture those new drugs. I find that in the USA, the new inventions of drugs are far more than in Britain. What you have been able to invent in England by way of new drugs is far less than what they have been able to do. Is England satisfied that all those new drugs that are being invented in the USA are now being manufactured in the UK as a result of section 41? For, if those inventors abroad do not manufacture them in UK, then sec-

tion 41 could be enforced and a compulsory licence could be given. Has that helped in the expansion of the pharmaceutical industry in England?

Mr. A. G. Shaw: I think that the expansion of the pharmaceutical industry in England takes place because these drugs which are developed in the USA are manufactured in Great Britain by the companies which have come and established themselves in Great Britain. They also are assisted by licence agreements and research agreement between the one company and the other, as a result of which one particular company in Great Britain will manufacture a drug which has been developed by somebody else. This is the pattern of development in the UK.

Shri R. P. Sinha: With regard to section 41, there is in England a differentiation in the matter of compulsory licence, between the drug and the food industry and other industries. Do you think that such a differentiation is correct?

Mr. A. G. Shaw: There is a difference between section 41 and section 37, and this is the difference. As I have explained, I think it is wrong that there is this discrimination against the inventor of a new and valuable medicine, because in order to develop a medicine today, the pattern of research is that you have to discover and manufacture many many compounds; it is not in the manufacture of the compound that the value lies but in the use of that compound in the treatment of disease. As I have mentioned in one of the documents which I have here, the comptroller of patents states that the relationship of discovery is probably in the ratio of 2500 substances to one substance which may have some use in the treatment of disease; the others are far too toxic. Because the value lies there and because of the value of the product, I think that this discrimination against drugs and medicines in section 41 should go.

Shri P. K. Kumaran: Before being the powers under section 46(1), the British Government started importing medicines from unlicensed sources, from countries like Italy. The British Government were not able to procure locally, that is, from England, the medicines which they required for the national services. Was that not so?

Mr. A. G. Shaw: The drugs which were imported from abroad were being made in Great Britain.

Shri P. K. Kumaran: But the local manufacture did not find it convenient to supply the thing to the British Government at reasonable prices. The prices quoted by the local manufacturers were high when compared with the import prices.

Mr. A. G. Shaw: The prices quoted by the local manufacturers were high in relation to the prices at which the drugs were imported, because, as I understand it, the companies which had manufactured the drugs in other countries had not done research which led to the discovery of the particular drug. They have no research cost to cover. As I have already said, you have to search for a long time to get a new product which is useful in the treatment of diseases. It is obvious that certain drugs that you manufacture can be cheaper if you are a country carrying on no research.

Shri P. K. Kumaran: In that case, later when the Government started using powers under section 46(1) and the local manufacturers found it convenient to come to some sort of agreement with the British Government, do you think they will supply after incurring a loss?

Mr. A. G. Shaw: The position is that the Ministry of Health is no longer using section 46.

Shri P. K. Kumaran: But a situation has been created whereby the

local manufacturers agreed to supply at reasonable rates. That was because the British Government used power under section 46(1).

Mr. A. G. Shaw: I do not know at what rates the drugs have been supplied, I have not got that information. I know that at the present time these negotiations on prices are proceeding; in the meantime, drugs are being supplied and hospitals are told that they will be charged at agreed prices later.

Shri P. K. Kumaran: That is true. We do not expect you to give the details of the prices, but we can infer. Keeping section 46(1) in the Act has now proved that it is in the interests of the British nation. Is it not?

Mr. A. G. Shaw: The inclusion of section 46(1) in the Act is there, and I am quite sure it will continue to remain there. What we are suggesting is that when it has to be used for purposes other than defence, there should be an enquiry to establish that its use is in the national interests. This is the point in the memorandum which we have submitted to the Committee.

Shri Tulsidas Jadhav: In India, the cost of labour is low and the prices of drugs are very high. Is it not desirable that certain measures suggested in the present Patent Bill should be there to reduce the prices?

Mr. A. G. Shaw: With the greatest respect, I know little of India. This is my first visit to India. I arrived three days ago. I do not know the conditions here. In any event, this is a question which is surely for the Parliament of India to decide. It is not for me to offer any personal observation on such a point.

Shri D. P. Karmarkar: Page 12, para 46. What are the provisions of section 32(3) and 40 referred to therein, in brief?

Mr. A. G. Shaw: In brief, section 32(3) is a revocation of the patent by the court. In other words, the Government would have to apply to the court and ask for the patent to be revoked, and the court would then decide whether it should be revoked. Section 40 gives the power for a licence to be endorsed on application.

Shri D. P. Karmarkar: We should like to know the rationale behind sections 41 and 46. Is it a social purpose?

Mr. A. G. Shaw: The rationale of section 41 is that it makes special provisions for food, drugs and medicines on the assumption that this was necessary, there may be special need. As I have explained, in today's circumstances such a discrimination is unnecessary. Section 46 is used to give the Government the right to use certain patent inventions for Government use.

Shri D. P. Karmarkar: Under sections 37 and 41 there is a difference in time.

Mr. A. G. Shaw: Under section you can make an application at any time; under section 37 you have to wait for a period of three years.

Shri D. P. Karmarkar: This was the discrimination you referred to a little while ago?

Mr. A. G. Shaw: Yes.

Shri D. P. Karmarkar: So far as you are aware, this definition of a substance "capable of being used as food or medicine or in the production of food or medicine" in section 41 has not given rise to any difficulties?

Mr. A. G. Shaw: Not as far as I am aware, there was one case when it was argued—I have not got the details—whether or not a particular compound was a food or a drug, and they came to the conclusion that it was a drug.

Shri D. P. Karmarkar: Normally this has not given rise to any difficulties?

Mr. A. G. Shaw: No. There is no definition provided in the Act itself.

Shri D. P. Karmarkar: What are the terms of reference of the committee you referred to that was appointed?

Mr. A. G. Shaw: This Sainsbury Committee was appointed in March, 1965 and its terms were:

"To examine the relationship of the pharmaceutical industry in Gt. Britain with the National Health Service, having regard to the structure of the "industry, its commercial policies and the firms comprising it, its pricing and sales promotion practices and their effects on patents and the relevance and value of research, and to make recommendations."

Shri D. P. Karmarkar: Normally export prices would be more than what has been negotiated as the agreed price between Government and industry.

Mr. A. G. Shaw: Normally the export price is taken into consideration in determination of the price that is charged in the home market by the price regulation scheme. One would expect the export price to be slightly higher than the home market because of the cost of transporting the drug to the market, and due allowance is made for that in the scheme, but if a company establishes that it exports 25 per cent of a particular product in export markets then the price which it charges to the home market is in relation to the price which it obtains in export markets . . .

Mr. Chairman: What will be the difference between the internal price and export price?

Mr. A. G. Shaw: Only the cost involved in transportation.

Mr. Chairman: Could you give the percentage?

Mr. A. G. Shaw: Not without detailed examination. If you would like to see this scheme I will leave it here.

Shri D. P. Karmarkar: It would be better, Mr. Chairman, if he leaves all the relevant documents to which he has referred.

Am I correct, if I infer from what you told us, that the principal reason why the Government either imported or permitted other importers to make importation of patented medicines was the difference in price and that, so far as you know, they could buy cheaper from the outside market than the prices offered by the local concerns?

Mr. A. G. Shaw: Only the Minister himself can answer as to why he decided to do this. I can only offer my personal opinion.

Shri D. P. Karmarkar: Have you in the course of your studies or even earlier found that the prices at which the Government imported patented medicines were advantageously lower than the prices at which similar medicines were offered by local concerns?

Mr. A. G. Shaw: Obviously, Mr. Chairman, the prices at which Government imported the drugs from abroad were lower than the prices in Great Britain; otherwise they would not have gone to the trouble of importing them.

Mr. Chairman: Do you agree that the Government has reserved the right to control the prices for internal consumption?

Mr. A. G. Shaw: The Government has agreed with the pharmaceutical industry on this scheme which in fact controls the prices at which drugs are supplied to the chemists and to the

public, but the scheme provides for certain incentives to the manufacturers.

Mr. Chairman: You should have no such objection if the Government of India also reserved the same rights?

Mr. A. G. Shaw: That is for the Government of India to decide.

Mr. Chairman: Considering the powers your Government have reserved for themselves, you should have no objection if the Government of India reserved the same rights.

Shri R. Ramanathan Chettiar: In 1960 the prices had fallen from £ 60 per 1000 tablets to £ 9.10 sh.

Mr. A. G. Shaw: I do not know the prices at which the Government imported because these were never disclosed, not even to my association. I know there has been speculation in the Press and elsewhere, but I have not seen any information about the prices at which the Government imported the drugs.

Shri R. Ramanathan Chettiar: It had fallen even to £ 4.10 for 1000 tablets.

Shri D. P. Karmarkar: Earlier, were the patentees given the right of exclusive importation for the period of validity of the patents or there was no such privilege granted?

Mr. A. G. Shaw: This, Mr. Chairman, is a very detailed question on the general aspects of the Patent Law on which I do not claim to be an expert. I am not, at any rate, a patent lawyer. If you would like me to answer that question, I can study the question and prepare an answer on this point, but now it is not a point within the brief on which I have come.

Shri D. P. Karmarkar: According to the Indian law, anyone granted patent rights for manufacture is also simultaneously given the rights for exclu-

sive importation of the particular product or process.

Shri Bibhuti Mishra: Ours is an under-developed country, Mr. Shaw and yours is a very developed country. I want to know how far your country has been able to help this country in the matter of research and technical know-how?

Mr. A. G. Shaw: I have not got the answer to that. It is something in relation to India which I cannot answer.

Shri Bibhuti Mishra: Is there any difference in the prices charged by you for those who take medicine from your stock and those who are under your National Health Service?

Mr. Chairman: He has already said that there is no difference.

Shri Bibhuti Mishra: You said that some years back England banned the import of medicines. Is it good for this country to ban import of medicines from other countries?

Mr. Chairman: That is for you to decide.

Shri Bibhuti Mishra: He has come all the way from England to help us by giving his opinion. His country is much more advanced than our country. I want to seek his advice about my own country.

Mr. A. G. Shaw: I am unable to give any such opinion.

Shri Bibhuti Mishra: When the Patent Law was enacted in your country, it was done keeping in view the interests of your own country. May I know how far those interests correspond to the interests of this country?

Mr. A. G. Shaw: Mr. Chairman, I have come here, if I may say so, to explain two developments which have occurred in the United Kingdom in regard to certain aspects of this law

which are comparable to certain provisions of your Bill. This is the basis of my memorandum and that is why I have come to talk to you this morning. I do not think I can usefully answer the question that the hon. Member has put.

Shri Sham Lal Saraf: May I know whether the law of patents has given rise to monopolistic tendencies and there are international combines and groupings, specially in the field of drugs, medicines and pharmaceuticals?

Mr. A. G. Shaw: Here again it is a general question of the patent law which is outside my brief. If the Committee would like me to answer that question, I would like to study it and write to you later I have returned to England.

Shri Sham Lal Saraf: There is a lot of criticism in India of the patent law because it has given rise to monopolistic tendencies.

Mr. Chairman: He says he has not studied this question.

Shri Sham Lal Saraf: We would be very thankful to him if he enlightens us on this point later.

I understand that your country and your law is more in favour of registering under the patents law the end product and not the process.

Mr. A. G. Shaw: The reason why our present law provides for product protection is set out in the recommendations of the Swan Committee. I did refer to that earlier on, and I am quite willing to leave the document with you. If I could add my own personal observation, I think product protection would help to stimulate the advance of pharmaceutical research in Great Britain.

Shri Sham Lal Saraf: Is it to encourage incentive for research and inventive genius that your law treats on par inventions of drugs and pharmaceuticals along with mechanical and other devices that are patentable?

Mr. A. G. Shaw: If I have understood the question correctly, we have explained our view to our government and it is that in order to encourage the maximum inventive genius and use of the development of medicines there should be no difference between drugs and pharmaceuticals and other type of inventions.

Mr. Chairman: The hon. Member wants to know whether the UK law is on par with the laws in other countries so far as this aspect is concerned. Have you studied the comparative position in different countries?

Mr. A. G. Shaw: As I explained earlier, I am not a patent lawyer and I have not made an international survey of patents and patent laws. I am the Secretary of an Association.

Shri Sham Lal Saraf: In view of the fact that very few applications have been addressed to the Controller of Designs and Patents what impression do we get about the present law? Is it working satisfactorily, as far as the operation of registration is concerned?

Mr. A. G. Shaw: To the best of my knowledge, yes.

Shri Sham Lal Saraf: With regard to the percentage of royalty on what basis does your Controller of Designs and Patents fix it?

Mr. A. G. Shaw: The provisions of section 41 in regard to royalties etc. are set out in the text which I reproduced, and during my expose I referred to the way in which the Comptroller gives his decision.

Shri Sham Lal Saraf: It is reported that in Italy, for example, there is no patenting of drugs and pharmaceuticals. Is it as a result of this that the medicines imported from that country were not only found to be defective but also deficient in a number of substances? Can the reason be that because they had not patented the inventions so people began to

manufacture all sorts of things, making it all the more necessary to patent drugs and medicines?

Mr. A. G. Shaw: I am not an international expert on patents. But I understand that a Patent Bill is now before the Italian Parliament, just as the Patents Bill is before your own Parliament. In that Bill it is suggested that drugs etc. should be patented.

Shri Kashi Ram Gupta: I conclude from what you have stated up till now that you are not agreeable to sections 41 and 46(a) as they stand.

Mr. A. G. Shaw: No, Sir. We have suggested that section 41 should be repealed to avoid this discrimination. In section 46, in the application of the way in which that section should be applied, should be reviewed. We have not suggested that section 46 should be repealed.

Shri Kashi Ram Gupta: But you are not agreeable to sections 41 and 46(a) as they stand?

Mr. A. G. Shaw: We have not suggested that section 46 should be altered. We have only suggested modification of its method of application.

Shri Kashi Ram Gupta: Does it mean that you are suggesting that in our proposed Bill sections 87 and 88 and 98 to 100 should not be there?

Mr. A. G. Shaw: I am not suggesting anything at all to your Committee. It is for the Committee to decide. I have come here to tell you what the position in Great Britain is.

Mr. Chairman: He has not made any comments on our Act. He has only spoken about the sections in the British Act and how it has worked.

Shri Kashi Ram Gupta: Are you in favour of compulsory licensing system, as provided in the Act, or not?

Mr. A. G. Shaw: It is not for me to give replies or comments on your own Act. In my opening remarks also I made only comparisons.

Mr. Chairman: The witness says that he is not competent to make any comments on our Act.

Shri Kashi Ram Gupta: But there is section 41 in his own Act.

Mr. Chairman: He has stated that it has not been repealed.

Shri Kashi Ram Gupta: He is in favour of repealing section 41.

Mr. Chairman: They are trying to repeal it.

Shri Kashi Ram Gupta: That means, he is in favour of removing the licensing system. That is what I conclude. Then, he has referred to the rate of royalty and in our Bill it is provided that there should be a fixed rate of royalty. In his opinion does UK also favour such fixation of the rate of royalty or will it be in the interest of the industry as a whole?

Mr. A. G. Shaw: There is no fixation of royalty in the U.K. law. Each one is decided by the Comptroller on application.

Mr. Chairman: By negotiation.

Shri Kashi Ram Gupta: The highest court in England has given the decision to retain the powers with the Government about section 46(a) and now, you say, the Government has set up a committee to go into the whole affair. Does it mean that the problem is there before the Government for a change in spite of the decision of the highest court?

Mr. A. G. Shaw: The decision of the highest court in the land was on the interpretation of the statute as to whether the supply of drugs to National Health Service hospitals was within the term "Services of the Crown". The House of Lords, the

highest court, decided that that was the case by three to two; but the committee which has been established and to which I have referred has very much wider terms of reference than that.

Shri Kashi Ram Gupta: You say that you are neither competent nor do you have the mind to say anything about our Act and Bill, but you have come to give evidence before us in relation to your Act, which means that we can conclude that so far as the application of those clauses in our Bill is concerned, your opinion has to be counted in respect of your sections.

Mr. Chairman: It is for us to consider. What can he say?

Shri Kashi Ram Gupta: He has come here to give evidence in respect of some sections of their Act. He must have studied the question of limitation of period of patent.

Mr. A. G. Shaw: I have not dealt with this point.

Shri Kashi Ram Gupta: You have not dealt with other points of your Act except these two sections.

Mr. A. G. Shaw: In my evidence here I have dealt with two specific sections.

Shri Warior: How far will the comparable provisions in the Indian Act to the provisions in sections 41 and 46(a) affect the pharmaceutical industry in Britain?

Mr. A. G. Shaw: They have affected the pharmaceutical industry in Great Britain by giving it a period of uncertainty as not to know what further development might occur. The Government, when it first used section 46, bought only five drugs from abroad. The industry did not know whether in the next year the five drugs would be 20, 25, 30 or 50. So, this is a period of uncertainty which must cause manufacturers in the country to wonder as to what proportion of their resources they can

continue to devote to research. I think, this is shown out in a way by the figures which I gave which showed that there has been a levelling off in research expenditure.

Shri K. K. Warior: You said in your statement that new inventions made in countries other than Britain are taken to Britain by the same manufacturers; they establish their manufacture there and they process it there. Suppose, a firm is not willing to give such know-how, will Britain allow the import of the product for sale by these sections?

Mr. A. G. Shaw: Know-how does not go in the patent specification; the know-how is contained in what the manufacturer knows. I do not think that we have any instances where we think we are short of any essential medicines because they are not being developed in the United Kingdom by one company or another.

Shri K. K. Warior: Where a product or process is not patentable in the country of origin, will Britain allow that product or process to be patented in Britain under the Patents and Designs Act?

Mr. A. G. Shaw: The British Patent Act stands on its own. If you apply for a patent in Britain, you apply under the conditions which apply under that Act.

Dr. L. M. Singhvi: What is the composition of the Association of the British Pharmaceutical Industry; in particular, are there any members of this Association who are principals or who have a holding interest in any drug manufacturing companies in this country?

Mr. A. G. Shaw: I am sorry, I have not got a list of the members of my Association with me, but I know that there are a number of British companies who are established in this country. For example, the British company, Glaxo, I know, has a factory in Bombay because I passed it

on the way to the airport. I also know that the British Drug Houses is also established here.

Dr. L. M. Singhvi: Would you, as Barrister-at-Law and as one associated for a number of years with the pharmaceutical industry in Great Britain, say that the exigencies and the controlling considerations of patent legislation would have to vary from one country to another in accordance with the demands of a given national economy as also the stage of scientific and technological development in that country?

Mr. A. G. Shaw: That is a very wide question which, with respect, I do not feel competent to answer.

Dr. L. M. Singhvi: I would like to draw your attention to a statement that you have quoted on page 2 of your memorandum where you quote a departmental inquiry committee. Do you hold that this was a legitimate reason, at least historically, at the stage at which the amending Act in 1932 was enacted?

Mr. A. G. Shaw: At the time the 1932 Act was enacted the situation with regard to the development of medicines was quite different to what it is today. I am sure, all Members of this Committee will know the vast changes which have occurred in the practice and treatment of diseases in the last 20 or 30 years since the advent of, what is known as, chemotherapy. I think, the comment which is made in this document here should be looked at in relation to the state of medical knowledge and treatment which existed in the world at that time.

Dr. L. M. Singhvi: I invited your attention specifically to this statement which was contained in this Committee's Report somewhere in 1932. Conditions in 1932 were somewhat more comparable to those in India today.

I would like to know whether this change of circumstances which you referred to has come about mainly because of a greater pace of technological development in your country and therefore, the considerations which might have been applicable and relevant in 1932 in your opinion are no longer relevant and valid?

Mr. A. G. Shaw: I think that the technological advance has come about in every country.

Dr. L. M. Singhvi: I would like to invite your attention to para 9 on page 3 about the Swan Committee Report. They put forward the new recommendation that novel chemical compounds, including those intended for use as food or medicine, should be made patentable *per se*. What was your Association's point of view in respect of this recommendation?

Mr. A. G. Shaw: My Association at that time did not give evidence before the Swan Committee. But the principle which is contained therein has been accepted that the products should be made patentable *per se* by my Association because we believe that it is related to technological development in Great Britain and that the Great Britain has found important drugs.

Dr. L. M. Singhvi: How long, on an average, does it take for an application under Sec. 41 to mature in your country?

Mr. A. G. Shaw: I am afraid that without looking into the record I am not in a position to give my answer. But, I would say that perhaps it takes about 18 months or so to mature. Anyway I have not got the information on this matter just now.

Dr. L. M. Singhvi: You have made a reference at page 5 on para 23 that the rapid increase in the number of applications submitted since the time has caused serious concern to the pharmaceutical industry in the United Kingdom. I take it that your

reference is to the year 1960. However, I invite your attention to the figures given by you at page 4 which did not disclose any rapid increase in the number of applications submitted since 1960. You would yourself notice that according to your statement, in 1961, the number of applications submitted was only 3 whereas it was four in 1962 and 1963 but in 1964 it has risen to 15.

Mr. A. G. Shaw: In 1960-61 and 1964 the number of applications submitted was more. . . But, no application has been submitted in 1965. But, upto 1959 beginning from 1949 (for ten years), there were only 8 applications but from 1960 to 1964 there were about 30 applications which were submitted. To my mind, there is a fairly rapid increase in the number of applications.

Dr. L. M. Singhvi: In 1960 there were six applications; in 1961 to 1963 there were only 3, 4 and 4 respectively.

Mr. A. G. Shaw: During the period from 1949-1959—in this ten-year period—you would have seen that only 8 applications were submitted. I admit that the figures from 1961 to 1963 are only 3, 4 and 4. But, in 1964, it jumped to 15. I think there is a significant difference in the figures of 8 applications in ten years from 1949-1959. Whereas there were 8 applications in this period, the number of applications submitted was 32 from 1960 to 1964—a significant increase in these five years.

Dr. L. M. Singhvi: What was the nature of the concern of the pharmaceutical industry in the U.K.?

Mr. A. G. Shaw: The concern of the pharmaceutical industry was to have compulsory licences for importation into the U.K.

Mr. Chairman: He has given the facts and he gave that answer; it was for importation.

Dr. L. M. Singhvi: You have mentioned about Sec. 41. According to your Association this discriminates unfairly against the pharmaceutical inventor by not providing a comparable protection to that afforded to holders of patents for other types of invention. Would you not consider this from another point of view viz., the importance and significance of a particular kind of invention or product of an industry is not in terms of how an inventor of a particular kind of a product is treated?

Mr. A. G. Shaw: We feel, Mr. Chairman, that Section 37 provides adequate grounds upon which anyone can come and apply to the Court or to the Comptroller in order to secure a compulsory licence.

Dr. L. M. Singhvi: It is your Association's contention that the power to give adequate protection to the pharmaceutical industry would result in condemnation of its research efforts. Whether this is substantiated by experience and actual facts and whether there was really a very substantial condemnation of research in your country as a result of somewhat lesser protection afforded to the pharmaceutical industry.

Mr. A. G. Shaw: I had mentioned in my expose, Mr. Chairman, certain figures which give the results of research expenditure from 1957 to 1963. I pointed out that in recent years it has shown that the expansion has not been maintained. I also said that the effect of Secs. 41 and 43 did influence the amount of research which the industry was contemplating to do.

Dr. L. M. Singhvi: One more question that I would like to ask is this. What was the result of the decision of the House of Lords in the Swan's case? Can you give us a copy of it?

Mr. A. G. Shaw: I have got the decision with me. I have given the recommendation of the Swan Committee on page 3 of my memorandum.

Dr. L. M. Singhvi: On page 12 of your memorandum you have mentioned several points in respect of providing against the arbitrariness under Sec. 46. At the end you say that instead of exercising Sec. 46 the Government department were to make use of its powers under Sec. 32(3) or 40 of the Patents Act, 1949, the interests of the public would be equally well served and the interests of the patentee better protected. You have also suggested that a specific enquiry should be followed by various methods including the one which I have just now mentioned. If such an enquiry is made, whether it would be more beneficial to Government or not? Or whether it would be more beneficial to have the proceedings instituted under Sec. 33(3) or 40 of the Evidence Act? What is the specific purpose of this suggestion?

Mr. A. G. Shaw: The purpose of this suggestion is to refer it to the Tribunal so that both the parties can appear and put their points of view when the Tribunal will be able to decide whether, in the national interest, the Government should proceed to use its powers having regard to such considerations as I have mentioned there as that would not discourage the growth of industry and research in the U.K.

Dr. L. M. Singhvi: Would you suggest that here, in India, there should be a Specialised Patent's Tribunal as has been suggested for your country or would you like this enquiry to be made by an *ad hoc* tribunal or by a common Court of Law?

Mr. A. G. Shaw: I am afraid I cannot give a quick answer to this question. That would be done by an independent tribunal.

Mr. Chairman: Would you want a judicial tribunal?

Mr. A. G. Shaw: Not necessarily a judicial tribunal.

Shri Shyamnandan Mishra: We quite appreciate the anxiety of the learned witness to confine himself to two limited points. But, we would also like him to appreciate us to ask him to give those very points in a somewhat wider context. In our anxiety to do so we would like to seek some information with regard to certain points and I hope they would not be outside his brief. The first one relates to the ratio of utilisation of patents in his country; the second one is the ratio of patents to inventions over a period. What is the trend of the ratio of inventions to patents? So far as I could see from a distance, it appears that in England the inventions have been rather on the decline and the patents have been on the increase. That would be a matter from which one can take a lesson. I would like to seek information on these two points.

Then, what is the amount of royalty paid and received by the United Kingdom?

Mr. A. G. Shaw: I have mentioned in my memorandum about the royalty that was awarded by the Comptroller, in these two cases. Sec. 46, that is a negotiated royalty.

Regarding the utilisation of patents in the country I have no information.

The only information which I know is available is published in the report of the Patents Office in London. It shows the number of applications and specifications which are filed.

Shri Shyamnandan Mishra: What is the number of patents effective at a particular point of time in UK and what is the number of inventions which have occurred during a particular period—that information is not available in the UK?

Mr. A. G. Shaw: Not to my knowledge. I would try and make inquiries when I go back.

Shrimati Sharda Mukerjee: The learned witness has particularly stressed on the royalty which comes under compulsory licence and in the UK after 1949 under Section 46. As you know, the Bill provides for a maximum 4 per cent royalty under Clause 88. I would like to know if he has any information regarding the percentage of royalty which is paid to the pharmaceutical companies and other industrial companies which may have similar kind of agreements in other developing countries. Has he got any information on that?

Mr. A. G. Shaw: No information on that point at all.

Shrimati Sharda Mukerjee: You have no information regarding the rate of royalty in the other developing countries. Particularly you have mentioned that in Great Britain you have given a reference to a judgment in which the decision was 18 per cent royalty ex-factory price. The Bill here provides for 4 per cent royalty. I would like to know what is the general trend of royalties given in other developing countries.

Mr. Chairman: He has given the answer. He has not studied the position in other countries. In UK it is negotiated.

Shrimati Sharda Mukerjee: Has he got any idea that 15 or 17 per cent is above the average because his experience may be 4 or 5 or do we take that 15 or 17 per cent is normal?

Mr. A. G. Shaw: There are only very few decided cases under Section 41 which was the Section I came to talk to you about, I have given you the three cases where at the present time the royalties are working. It is a very limited number. But I have given you all the information that is available at my disposal.

Shri P. S. Naskar: You have referred to one of the recommendations of the Swan Committee that novel chemical compounds including those

intended for food should be made patentable. Has this recommendation been accepted in this 1949 Act?

Mr. A. G. Shaw: Yes, indeed.

Shri P. S. Naskar: Under which Section?

Mr. A. G. Shaw: I am sorry I cannot give it immediately. It would be somewhere within Sections 19—26 of the Patents Act 1949 which talk about the grant, effect and the terms of the patent. It includes chemical products *per se*.

Shri P. K. Kumaran: Will he be able to tell us the number of patents which the members of his association have taken out in India?

Mr. A. G. Shaw: I am sorry I have no information on that.

Mr. Chairman: It is only two companies which have Branches here. He is not fully conversant.

Shri P. S. Naskar: It is not there. I went through Sections 19 to 26. I have not come across the use of the words '*per se*'.

Mr. A. G. Shaw: By '*per se*' means the product patent for a chemical substance in the UK. These words '*per se*' are not there. I am sorry if I have misused the term.

Mr. Chairman: You told the Committee some time back that the prices for the manufacture of an article are fixed. Who does fix that? You said that after a certain time the Comptroller comes in and refixes the internal prices. But just in the beginning of the manufacture you said that the prices are for a certain period. If it is not fixed by the Comptroller is it naturally within the discretion of the manufacturer to charge any price?

Mr. A. G. Shaw: The price which the manufacturer can charge for his product is determined by the manu-

facturer himself when the product comes into the market for the first time. It possesses a certain freedom period during which the manufacturer's price is charged. But after that period ends, it comes under the control of the Scheme.

Mr. Chairman: What is that period?

Mr. A. G. Shaw: 2—4 years. Four years for a product which has had a specific research; 2 years for other products.

Shri D. P. Karmarkar: That is also a voluntary scheme? There is no statutory backing?

Mr. A. G. Shaw: That is a voluntary scheme.

Mr. Chairman: In spite of the decisions and inquiries held in UK, Sections 38, 41 and 46 still remain on the statute?

Mr. A. G. Shaw: Yes, Sir.

Mr. Chairman: Thank you.

Mr. A. G. Shaw: May I thank you very much indeed for your kindness in receiving me—some one coming from quite another country and talk to you on a subject which is of great concern to India.

Shri Sham Lal Saraf: Chairman Sahib: thank the gentleman on our behalf also.

Mr. Chairman: Your evidence is very illuminating and will be useful to this Committee because our Act is mainly moulded on your Act.

(The witness then withdrew)

(The Committee then adjourned to meet again at 14.30 hours).

(The Committee reassembled at 14.30 hours)

II. Dr. K. M. Parikh—Zandu Pharmaceutical Works Ltd., Bombay.

(The witness was called in and he took his seat).

Mr. Chairman: Dr. Parikh, we have received your memorandum and we have circulated it to all the Members. If you want to add anything, you may do so. Afterwards, the Members will ask questions which you may reply.

Dr. K. M. Parikh: Hon'ble Chairman and hon'ble Members, I am very happy to tender my evidence here before your learned Committee. I would like to point out at the outset what is patent. Normally, a contract between the Inventor and the State, so that State grants limited monopoly in order to encourage invention and inventor is required to make full disclosure of the invention, and so that at the expiration of monopoly it can be used by the public at large. Also during the time of his monopoly inventor is required to satisfy the reasonable requirements of the public. Thomas Jefferson says, 'Society may give the above rights, but this may or may not be done according to will and convenience of the society without claim or complaint from anybody'. I would like to put forward the following quotations from the United Nations Economics and Social Council Report on the role of patents in the transfer of technology to under-developed countries, dated 9th May, 1964.

"In the case of inventions of special interest to the public welfare or security, provisions have been made in many laws to throw their use open to other than the inventor. Thus, in many countries no patents may be issued for inventions in certain fields (especially food and medicine). In cases where patents are issued, provision is made in the public interest.

In conclusion it may be stated that the creation and delimitation of the inventor's right is essentially a process in which account is taken of and attempt is made to reconcile and satisfy the whole scheme of public and private interests pressing for recognition, i.e., interest of inventor, social interest of encouraging invention, the interest of the buying public to enjoy the fruit of the invention upon fair and reasonable conditions, and the interest of the national government to accelerate and promote the economic development of the country."

Shri Baid: How are the inventor's delimited?

Dr. K. M. Parikh: It is delimitation of the rights of inventors.

Shri Peter Alvares: May I submit that the witness makes his statement in full and then we ask questions?

Mr. Chairman: Yes, questions afterwards.

Shri Sham Lal Saraf: Clarifications too.

Dr. K. M. Parikh:

"It is recognised even under the Paris Convention—under the principle of National treatment that, each country applies its own standards to all applicants and patentees...with regards to patentability, formalities, duration of patents, conditions of use etc. This may result in a situation in which nationals of a given country receives less-generous treatment in other countries... than afforded in one's own country or vice versa. Since each national treatment country is free to determine, according to its own needs...the degree of such protection will vary from country to country'".

It was the practical experience of our Government that is given below

in a reply to U.N. Economic and Social Council.

"Patent system, which yield advantages to highly industrialised countries, does not produce the same results when applied to the under-developed countries."

It further states, "there is no doubt that normally granting of patents to foreign firms stimulates the rate of invention in foreign country...Most countries have little if anything to gain economically from such grants.

"The matter assumes great importance in respect of patents for drugs and food articles. It is a fact that the price of the same drug varies considerably from country to country. The question of public interest involved in these cases."

From the above considerations and conclusions of the U.N. Economic and Social Council, the following points are clearly established and are having universal acceptance:

- (1) Patent may or may not be granted for a class of commodity.
- (2) Pharmaceuticals are to be treated on different grounds—and this does not amount to any discrimination.
- (3) No industrial property rights are involved or violated.
- (4) No country (particularly members of Paris Convention) shall have any objection to such special treatments.

Now I will discuss a little on the patents in pharmaceuticals (drugs).

In recent years in the United States, Canada, New Zealand and South Africa—special committees have considered this problem at length. New Zealand agreed for restriction on drug patents, Canada suggested abolition of drug patents. In United States, in the bill, it was contended that three years should be ample

time to recover research outlays and maximum royalty of 8% for "unrestricted licence" that includes grant of all technical information required for sale and manufacture by the patentee. The Syman Commission in South Africa suggested five years for drug patents.

Looking to the above and uniform conclusions of various Committees of experts in developed countries suggests that there is something radically wrong with the drug patents and is commonly abused. The best is abolition or otherwise restrict the same to the minimum possible number of years which was found to be three to five years for a drug patent. This is mainly because the drug's life is very short and hardly lasts a decade in this fast moving time. The abuse of patent is on a large scale, also mainly due to: he who orders does not buy and he who buys does not order; sometimes sentiments and helplessness of public are exploited. For example, a poor man drawing hardly Rs. 100 a month will spend any amount, even borrowing, for his ailing relation, loved ones, wife or a child, etc.

Thus it is very right that drug patent be abolished or a period of three, five or seven years may be imposed but not more.

Even if it is feared that this may harm some few inventors for good reasons, one extension of three years be provided by Controller or the proper authority if fully satisfied on such application and verification. This is with regard to clause 53.

Now I have given a small table where you see the items, the imported C.I.F. price, the local manufactured price, the percentage difference, and the finished stage price, that is when put in formulation form and these formulations are sold directly. For Vitamin B12 the C.I.F. price is Rs. 30 per gram while the local firms are manufacturing it at about Rs. 230 per gram. Similarly for

Chloromycetin, it is Rs. 80 while the local manufactured price is Rs. 400. You will see that in all other cases, Tetracyetin, Prednisolon and Tolbutamide, the local manufactured prices are much higher. Of course, in Tolbutamide, the patentee who is manufacturing this, is not selling this particular item to anybody and reserves it for his own use. An indigenous process for this particular item has been developed by the Haffkine's Institute, but this has been challenged as an infringement by the patentee and the matter is now before court.

The Development Council after taking into consideration all the aspects affecting the Indian production suggested that the local manufactured price should not be more than 60% above the c.i.f. price.

If the suggestion is considered with above quoted prices, it will reveal the true picture of the thing as it exists.

I have also given another table a little below on page 4 showing the patented items, the price of the item in some European and other countries and its price in India—a comparison of the two prices. Regarding Tab. Tolbutamide, in some countries including Germany and England it is sold for \$1.85, while in India, it is sold for \$3.57. These are figures existing roundabout 1958 or 1959. These I have taken from a published report.

Tabs. Chlopropamide is \$1.41 in Italy while in India it costs \$4. Aureomycin was sold in Argentina for \$1.19 while in India it was \$6.92. Tetracycline was sold in Argentina for \$1.19 while in India, it was sold for \$6.52.

Mr. Chairman: What is the unit?

Dr. K. M. Parikh: The price units are the same.

Particularly with regard to Aureomycin and Tetracycline, you will

see that the prices in India are the highest throughout the world, even higher than what were existing in the United States.

Now I will look at the pharmaceutical industry of this country. There are three groups that we can consider for our purpose here; that is, (i) those which are wholly foreign concerns; (ii) foreign collaborators, i.e. Indian plus foreign; and (iii) only Indian Industries. The first two, namely foreign and foreign collaborators, are having their vested interests and so instead of accepting the faults and remedying, they are all out to say the bill is fully harmful and the present law is very good. Particularly the second group of collaborators are more virulent than the former one.

The collaborators and the foreign vested interests point out the false advantages of the present patent law and disadvantages of this present Bill as follows. These I have gathered as and when I went through different literature. They say that (1) the present patent system stimulates research and technical progress. (2) The patentees disclose their inventions. (3) It is in the interest of the national economy. (4) The present law helps to create new products and processes. (5) The present system is not the reason for high prices. (6) It is in the interest of the national development; and (7) It will help the ability of the country to be independent of foreign advances in therapy.

Also they fear that if the present Bill be passed as it is, it will affect very badly in the following way: (i) Because of the point seven above, the country will require additional foreign exchange; (ii) export of Indian drugs will diminish; (iii) domestic know-how cannot be developed without foreign assistance; (iv) flow of foreign know-how will be slowed down; and (v) technical level and expansion of the Indian industry will be reduced.

Now we will discuss the so-called advantages due to the present Patent Law and the disadvantages shown if the present Patent Bill is enacted as it is.

Now we will be discussing it in detail. The first point is that they say that the present patent system stimulates research and technical progress.

Merely by looking to the number of patents obtained by the Indians under the present Patent Law in the last 100 years, it will be clear that it has neither stimulated research nor assisted technical progress under the present Patent Law in this country. In pharmaceutical industry, it is likely to be point few per cent.

The second point is that the patentees disclose inventions. It is true that when the patent rights are granted, it is understood that they have to disclose their inventions. But if it is really disclosure of invention, then why there should be a special agreement and charges for technical know-how which is required for the working of these inventions. If these inventions disclose the exact nature of everything in detail, then this may not be required. If you look into the conditions and specifications of various patents, such statements do not bring any one near the performance of these inventions.

I would like to take as an example one of the patents from Germany, namely manufacture of new sulphonyureas, Specification No. 58716 dated 8th May, 1956. In the Case Study I have pointed out the vagueness of their claim to the conversion of benzene-sulfonylthiourea into the corresponding sulfonylureas by treating sulfonylthiourea with agents eliminating sulphur. 'Agents eliminating sulphur' includes the present known methods which may be hundreds plus the additional ones which are not developed; even if somebody develops something by which sulphur can be eliminated, that is also covered and they are granted protection.

Thus it is not right to say that they disclose the inventions in right perspective.

It is said that the present law is in the interest of the nation's economy and development. A number of foreign-collaborated companies have sprung up. We call this as development. These companies are fully controlled by their parent bodies, and that only with the view of taking out the maximum for their parent bodies from this country. There is also a tendency to delay the process of manufacture under one pretext or the other so as to continue more and more import from their parent body. Under the plea of local manufacture in most of the cases it is merely bottling or repacking or gradually importing semi-finished products from their parent body and carrying out only the last stages here.

Here I would like to take one point with regard to Tolbutamide. As far as my knowledge goes, they are manufacturing it here from a raw material known as p toluene sulphonic carbamate which is imported at the c.i.f. cost of Rs. 20.70 per kg., against which the imported tolbutamide c.i.f. price is about Rs. 21.40 per kg. That is if we import the tolbutamide as it is from outside, the c.i.f. price is only Rs. 21.40, but the cost of the intermediate is Rs. 20.70 per kg. This intermediate is not, as it is, made into a potent product, but has to be mixed with others and the processes are to be carried out. You can see how this helps our foreign-exchange saving!

In this industry it is more a production of Proprietary than that of basic. Some may say that the production in 1948 was 110 million rupees worth, and now it is Rs. 1350 millions worth. These figures are given just to show what progress the pharmaceutical industry has made in this country. There are various things to look at. But I will give a simple instance of a product like Aspirin Tablet which was manufactured by a firm in India and compare the price of the same in 1956 and

1964, and you will observe whether it is the difference in the production or the value alone. In 1956 the price of 1000 tablets was Rs. 4.50 and in 1965 the price of 1000 tablets is Rs. 9.00. So this value of 1350 million rupees might have become in that fashion. But the actual production could be the same. The same drug cost Rs. 4.50 in 1956 but it was sold at Rs. 9.00 in 1965.

Also, some of the Pharmaceutical Industries Associations constituted of the foreign collaborated firms plead that they represent 70 per cent of the total production. This may be true so far as the production is taken on the basis of the sales value. But the following clarification will clearly bring out the real position.

I am giving below the installed capacities of Messrs. Glaxo Laboratories Ltd. and Messrs. Zandu Pharmaceuticals Ltd. as mentioned in the booklet *Indian Pharmaceuticals Industry* published by the Development Council—Drugs and Pharmaceuticals, Government of India in 1962.

Your honour will see from the figures that in the case of tablets and capsules and pills, as well as injectables, the capacity of Glaxo Laboratories is double that of Zandu Pharmaceuticals; it is the same in the case of Liquids; while in the case of ointments and powders the capacity of Zandu Pharmaceuticals is double that of Glaxo Laboratories. If you will consider the sales figure of these two firms you will very easily find out the difference in the prices of the two. Thus with merely the same capacity of production in terms of units your honour will observe the difference may be 10 times in terms of value.

Your honour will also note from the following example the difference of the prices of the stuff manufactured by the Indian manufacturers and a foreign manufacturer.

To give just one example, take Chloramphenicol. The price of the Indian manufacturer is Rs. 3 per

dozen, while that of the foreign manufacturer is Rs. 11 per dozen.

We can see that the difference in price will clearly bring out the production in terms of value and production in terms of quantity. As the production in terms of value is represented at about 70 per cent. by these foreign units, it may be inversely true about the production in terms of units for the Indian Industries. There are about 2,000 licensed concerns, drug concerns, in this country. Out of them, less than 100 may be foreign or foreign-collaborated ones, while the balance of 1,900 are Indian. And it amounts to this that 30 per cent of the value of the drugs and 70 per cent of the production is done by the 1,900 firms, while the hundred firms are doing 30 per cent of production and enjoying 70 per cent of the value. And this is mainly because in our country we have got a flair or craze for everything with a foreign label.

From the above explanation your honour can very well observe how our firms can be developed under the present patent law; but it is to enable the existing patent-holders to take away the maximum of our foreign-exchange in innumerable ways under the heads of Royalty, technical know-how, service, fair return on capital, Analytical Controls and Machinerics.

I have given an annexure which will clearly show—which has been published by the Reserve Bank—that in a period of three to five years these concerns take away their capital back. At the same time how the capital has been brought is again to be seen. They may send a machine from there to here, which may be owned by them there and the collaborators may agree to that, and it will be treated as capital participation.

It is claimed the present law creates new production and process.

So far as India is concerned, nothing new has developed in this country. But it may be true that our patent law

has helped foreigners to create new things in their country out of the foreign exchange paid by us through our nose.

It is claimed that the reason for high prices of drugs is not this Patent Law.

It is very well clear and shown in my memorandum on pages 4 and 5 and page 8 how the patent law is directly affecting the present high prices. It is also very clearly brought out by the American Senate Report No. 448.

I have given also a table which shows how patented products are very highly priced in this country. Therefore I do not see how it can be insisted that the patent law is not the reason for the high prices.

Almost all the well known companies in this trade all over the world are already having their subsidiaries in one form or the other in this country and now many small or medium class Foreign Industries are also attempting to enter. I do not understand how the present patent law increases the ability of the country to depend less on foreign advances in therapy. On the contrary it has hit hard our national development because it is always difficult for a new one, whatever he could do against the existing foreign well-known brands. Our dependence grows more on foreign collaboration; even the individual capacities are afraid of facing the giants and are tempted to go in for collaboration which is a fashion of today.

These collaboration firms are mainly governed by their present companies and thus the only intention is to serve the interest of the parent body in the best possible way. Therefore, it is too much to imagine that these collaboration firms will give out the know-how and train or develop our industry.

As mentioned before, the present patent-holders put forward the dis-

advantages of the proposed patent Bill if it is enacted as it is. We shall discuss them individually later on.

As seen in point 7 above, the present patent law has made us more dependent on foreign advances and because of that we need more and more foreign exchange, while if the Indian research and development will progress under the present proposed Bill it is clear that the foreign exchange requirement will be decreased and in turn it will earn the exchange.

The second point is that they fear that the export by these foreign units will diminish. May I know at present what the export of the patented drug is? It is practically nil. They export to earn import values, which help them to make large profits and considerable exchange for their home country in different ways.

How does this export help us? There is no question of diminishing export. On the contrary, the export of these products should have been increased and at a better price.

The third point is this. It is said that domestic know-how cannot be developed without foreign assistance. But the main purpose of the patent law should be to encourage the domestic know-how which is already existing so that it can be developed. We should rightly refuse them by abrogating the patents.

By our flying Boeings they are not built here; by collaboration nothing is developed; in order to have them here, we have to build them here. Similarly, by collaboration nothing can be obtained or developed here.

The fourth and fifth points are as follows. Flow of foreign know-how will be slowed down. This amounts to a threat. In India, we are doing everything for the uplift and betterment of our nation and within our framework those who can fit in and really wish to assist us are welcome

and so we should not submit to any such threats.

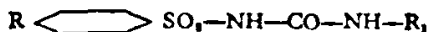
Also, what know-how has been brought into this country by these foreign pharmaceutical industries, or what products have been manufactured here by them? Whatever products are manufactured by them are all manufactured by other indigenous manufacturers too. This is concerning the proprietary medicines.

Now, let us take the example of tolbutamide. I have just now stated that the imported raw material costs Rs. 20.70 per k.g. while the imported tolbutamide would have cost us only Rs. 21.40. This clearly indicates the fact that the technology of the patentee is obsolete and old and it also suggests that indirectly a large amount of foreign exchange is taken out, and the Indian industry is prohibited from the manufacture of this material by legal threats. Thus, the present patent law has hindered the technical level and expansion of the Indian industry.

I would like to discuss the case study which has been given. I have already stated that I would like to discuss one of the patents here so that one could get a clear idea of the things.

As I have said, Hoechst has the manufacturing patent for tolbutamide now. I may state that this tolbutamide is a substance belonging to the group of substances known as sulphonylureas. This group consists of a large variety of compounds; hundreds of thousands or millions of them can be included under that category, and tolbutamide is just one of those sulphonylureas just one of those millions of compounds.

The general formula has been given as a combination of R with R1 as shown below:



When R and R1 is substituted with the proper radical, that is, methyl and Butyle radical, then it is called tolbutamide.

If R and R1 can be changed, then it will result in a number of compounds whose number would go to millions. It is the general formula for sulphonylureas which has been shown in this particular patent No. 58716.

The present patent 58716 covers the synthesis of an exceedingly large number of benzenesulphonylurea derivatives. As claimed in claim 1, compounds with the general formula:



will come under that patent. Normally, under this patent specification, whatever is supposed to be claimed under this formula could be claimed by them as their property; under this particular claim No. 1, they are claiming this particular compound of R with SO₂-NH-CO-NH-R₁.

Now, what is the definition of R and R1? Here are some of the forms which R and R1 can take. R can mean a phenyl radical or may contain any of the following namely; Alkyl branched or unbranched, alkoxyl residues or Dialkyl and Diakoxyl Halogens, Aliphatic hydrocarbons or Cycloaliphatic hydrocarbons.

So far as R1 is concerned, it can be any one of the following namely: Aliphatic hydrocarbons, cycloaliphatic hydrocarbons and its salts, straight branched chains.

The compound described by the formula is a combination of these two namely R and R1. Suppose R is a phenyl radical, then R1 can be any one of the combinations which I mentioned earlier; so the compounds that could be formed are not just one but several. It can be the methyl,

ethyl or butyl radical; if you make a permutation and combination of these things, it will result in an astronomically high number of compounds, and all those are supposed to be covered by this claim 1 of this patent.

If an organic chemist is to sit down and calculate the innumerable possibilities as described above, he will find, after reckoning for a few hours, that the number of compounds covered in this omnibus claim will amount to tens of thousands if not hundreds of thousands.

Here, I would like to quote what Justice Lord Loreburn has observed in one of the cases he has stated:

"This patent is bad for ambiguity in the specification. There seems to be some danger of the wellknown rule of the law against ambiguity being in practice invaded. Some of those who draft specifications and claims are apt to treat this industry as a trial of skill, in which the objects is to make the claim very wide upon interpretation of it . . .".

I shall come to the question of trial of skill a little later. In this particular claim No. 1, the claim is made in such a way that they can claim the whole lot of compounds under that claim. If others are going to manufacture the substances, then they can stop other people from working those things by virtue of this claim; even if that is challenged, then they can show this original patent for one compound and claim all the other compounds as their property. If amendments to permit such things are going to be made then I am afraid that would not be an incentive but a disincentive to the research workers here in our country.

Another thing is this that so many compounds are covered in this particular claim practically. The small people or the ordinary people would not like to enter into any dispute with them because even if they find out a

new compound they will have to find a new name for it, and the legal trial will go on for years as has happened in the case of the Haffekine Institute. They have prepared a sulphonylurea tolbutamide by a different process patented by themselves. Yet it is being challenged and it has been pending before the court for the last three or four years. Lakhs of rupees are required to fight out the case in the court. Most of our industries today are not in a position to undertake such heavy legal expenses.

Now, I would like to mention the name of another compound with the name of chloropropamide which belongs to the same sulphonylurea group. Pfizers who are a giant corporation also patented it and they put it out in the market. Immediately when this came to their notice, Hoechst said 'This comes under our patent; you are infringing on our patent rights'. And they began to fight. And they could fight because both were giant corporations and each one of them had a patent which could make a very wide claim. For four or five years the fight went on; ultimately when they knew that both were giant corporations, they granted the licence, so that Pfizers also could put the product in the market, as part of their patent.

The industry is a trial of skill. In writing a patent, it is only a matter of skill than anything else. If it were for one process only, then automatically the patentee would have been restricted to that process and he could not claim other processes.

Mr. Chairman: Is it your view that this patent can be claimed for all other combinations?

Dr. K. M. Parikh: Yes. According to their claim of R.I, it covers formulae with R and R.I, that means so many millions of compounds.

Mr. Chairman: This has been prohibited in the Bill.

Dr. K. M. Parikh: Not properly. In the Bill, it has been said that process is patented and not product. What I mean to say is that here also for these

particular products, they have covered as many as 13 processes, all conceivable processes as their claim. All the 13 processes are included in these 30 claims. That means, I have no option; I cannot manufacture these products. They have made these claims all in such a way that I cannot reach that particular stage.

Therefore, it should be so provided in the law that that it should be process patent and one process only which actually they want to use which will be most economical to them, so that research incentive will be there and people will find out a better process and make it more economical and better. That will be in the public interest.

Further, Lord Loreburn states:

"Some of those who draft specifications and claims are apt to treat this industry as a trial of skill, in which the object is to make the claim very wide upon one interpretation of it, in order to prevent as many people as possible from competing with the patentee's business, and then to rely upon carefully prepared sentences in the specification which, it is hoped, will be just enough to limit the claim within safe dimensions if it is attached in court. This leads to litigations as to the construction of specifications which could generally be avoided, if at the outset a sincere attempt were made to state exactly what was meant in plain language. The fear of a costly law suit is apt to deter any but wealthy competitors from contesting a patent. This is all wrong. It is an abuse which the court can prevent, whether the charge of ambiguity is or is not raised on the pleadings, because it affects the public by practically enter into the monopoly and does so by a kind of pressure which is very objectionable. It is the duty of a patentee to state clearly and distinctly either in direct words or by

distinct reference, the nature and limits of that he claims. If he used language which when fairly read is avoidably obscure or ambiguous, the patent is invalid whether the defect be due to design or to carelessness or to want of skill".

The reference is 32 RPC.

The claim 11 of the Patent refers to the conversion of benzenesulfonylthiourea into the corresponding sulfonylureas by treating sulfonylthiourea with agents eliminating sulphur. This means they cover everything, things not even known now. Here also Lord Ressel observed:

"The function of the claim is to define clearly and with precision the monopoly claimed so that others may know the exact boundaries of the area within which they will be trespassers. Their primary object is to limit and not to extend the monopoly."

I would like to discuss this case further. On p. 3 of my memorandum, I have given the costing of these tolbutamide tablets as in the vs fixed by the Kefauver Committee which clearly shows that even the Hoechst Chemical Corporation after taking their products and everything were selling to their licensee in America, M/s. Upjohn at \$3.39 per 500 grammes, that is, to manufacture 1,000 tablets. The entire cost is given. The tableting charge is \$2.00 in America which is hardly Rs. 2.83 2½ in India. Even if we calculate on the US standard, it will be \$0.86 per 1000 tablets. On that, they used to pay a royalty to Hoechst at the rate of 7½ per cent, and the selling price used to come to 13.11. The same thing was sold to the trade at about \$83.40 dollars, which is comparable with the Indian selling price. The same thing is being sold in Germany and England; it is cheaper there.

Shri R. Ramanathan Chettiar: Under the guise of the patent, they do this.

Dr. K. M. Parikh: Here there is no authority that can stop them. They take advantage of what is written in the law.

Continuing further with the case of tolbutamide, I would say that it is not to my knowledge that any company has started the research laboratory first, invested money and then afterwards they start manufacturing. Normally, they start manufacturing the unit first and from whatever profit they get, they assign 3, 4, 5 or 6% of their sale value. This is already calculated in the cost of the product which is marketed. This amount is put in successive years on a research laboratory. So there is no other capital as such created for research laboratory. It only means that research is done from the money obtained from the consumer. It is not that these corporations have invested money in it. It is the consumer's money.

Shri R. Ramanathan Chettiar: Is the practice different in your company?

Dr. K. M. Parikh: I am also doing it the same way; it can be the only way of doing research.

I was pleading that if fair chance is given to Indian concerns to be in this market at least, they can earn and spend more on research so that we can see that the development of this industry is tremendous. But today the real Indian industry has suffered greatly, because right after 1948, the Indian industrial concerns did not know how to create public opinion in this democracy so as to effect Government policy. Therefore, the policy has gone in such a way that it has always encouraged collaboration; the collaborators have come up and flourished. You see that hardly 100 firms take away 70 per cent of the total volume of sales in spite of the fact that these Indian concerns were existing long before independence.

Regarding cl. 5, only process is to be patented. Quite all right. But I would like to amend it further to say

that only one process which is effective and which is economical and which the patentee wants to use should be patented and not all the conceivable processes. I would then refer to the quotation from Mr. Leonard J. Robbins given in pages 7-8 of my memorandum and on the basis of that submit that the following change be made in Clause 4: "inventions where substances are not patentable but only one method or one process may be etc."

Clause 48. Normally tender buying is done by Government, local bodies, municipalities etc., not for profit but to distribute the medicines to the poor masses of the people who cannot afford to buy the drugs. Therefore, I feel that Clause 48 is very essential and should be retained as it is.

Clause 53, I have already made the point that the period should not in any case be more than seven years. The United States committee suggested three years, the South African committee suggested five years, the Canadian Committee suggested abrogation. Even the United States put in their Bill three years with 8 per cent royalty, including the royalty that the patentee has to give on technical knowhow, for manufacture as well as sales. So, when ours is a developing country where we have got the knowhow which we can develop, these patents should be limited to a maximum of seven years, from the date of application. I may also submit that all concessions and restrictions should relate to only one date, the date of application, as otherwise there will be confusion.

Clause 58(1). There was a case in 1948. CIBA took a patent for sulphathiazole, and May & Baker was the licensee in England. They had taken a patent not only for sulphathiazole but the compounds covering the whole group. This particular compound was being prepared by Boots, England, who had filed a patentee. So, they went to court and won the case, and the

patent of May & Baker was revoked because it was wide and ambiguous. They asked for permission to amend their patent, saying they would have it only for sulphathiazole but the court did not allow it. So, if amendments are allowed in the court in the course of litigation, it will give the patentee wider scope. Therefore, I strongly feel that under this clause amendments at the court should not be allowed. Moreover, if for any one claim the product or the patent is declared invalid, it should be treated as invalid *in toto*. Only such strict rules and regulations will make the patentee a little careful while drafting his claims, so that he will not claim everything possible.

Clauses 87 and 88—licences of rights with respect to patents in pharmaceuticals and drugs. This is absolutely necessary and must be retained. It is argued why there should be discrimination between pharmaceutical and other patents, why there should be compulsory licence in the one case and not in the other, but as I said in the beginning, it is common practice throughout the world that there are different systems for different commodities, and pharmaceuticals and drugs are being treated by most countries on special lines for licensing. Compulsory licence was there, but it was not so far utilised mainly because the process was complicated, and therefore there is nothing wrong in having licences of right. If anybody wants to prepare, why should he not if he has the capacity to do it?

I do not know how the Controller of Patents is the proper man to find out whether the applicant has the capacity to manufacture or not. We have got a very strict Drug Control Administration in this country which looks after the quality, the purity and capacity to manufacture. It is necessary according to the schedules that they have to go and inspect the equipment, procedures, laboratories, standards etc. So, they are the pro-

per authority to look after this. If the licence is once granted under the licences of right and he is able to manufacture anything, he has to get the necessary permission from the Drug Control Authority, whether it is a small-scale or a medium-scale industry; large-scale industry automatically comes under the Industries (Development and Regulation) Act for purposes of development, regulation, licensing etc. These are the authorities who will see whether he is the proper man or not. Why should there be duplication at the level of the Controller of Patents? So, if an application is made for licences of right, it should be immediately granted, because whatever the fees or the loss is borne by the applicant and nobody else. Even if he wishes to throw away money and not utilise the licence afterwards, there is nothing wrong in it.

The Senator E. Fefauver Committee in their report have stated:

"The conclusion would appear to be warranted that in this industry, the mere existence of patent protection is not a guarantee of invention, nor is its absence much of a barrier."

So, the best thing in the interests of this country is to abrogate the patents especially in the field of drugs and medicines. If this is done even for a short period of say ten years, you will see the difference.

I have also given one annexure published by the Reserve Bank which has already been discussed and which shows how by means of royalty etc. foreign exchange which is very scarce is being lost. The matter will be crystal clear to your honour that it is amply proved that the prices of the patented drugs are higher in this country even compared to the other developing countries. Why should Indians alone pay more to the giant corporations to meet their research expenses? In their characteristic way many foreigners and their friends will post vari-

ous points and see that under the law this continues to flow out from this country. The main point still remains. Are we to be influenced by the specialised techniques of the vested foreign interests and give up our grim determination to maintain our individuality?

In the memorandum I have suggested one point. From these calculations you may see that a royalty of four per cent or five per cent or ten per cent makes no difference so far as the price of these patents are concerned.

I may clarify one point. Who wants that the inventor should not benefit. He may be from any part of the world. The inventor must be encouraged. The royalty may be given. Only this patent Bill is necessary in order to stop the undue exploitation of people.

Shri Bibhuti Mishra: How many patentees are foreigners, how many are collaborators and how many Indians?

Dr. K. M. Parikh: I do not see much difference between collaborators and foreigners. Indian patents so far as pharmaceuticals are concerned may be about 3.5 per cent previously; it may be about 2.5 per cent now.

Shri Bibhuti Mishra: How much money is drained out through this business to the foreign country?

Mr. Chairman: He has submitted those figures which are published by the Reserve Bank. That will be circulated to the Members. I am requesting the witness also to send 65 copies.

Shri Bibhuti Mishra: What is your suggestion to have the know-how here—research scholarships to be set up in this country.

Dr. K. M. Parikh: My suggestion is very clear. These industries should be protected in the sense that only those who are really independent Indian industries—not collaborators or foreign firms—be given a chance to sell their products. They will defini-

tely do it. Not only that. I think about Rs. 15 crores is being spent by our government on researches in this country. I would like to give one example of Hoffkine Institute. They found a particular drug which was useful for the plague and they manufactured it. But they could not manufacture it because it was a patented product. The whole thing went to a court of law and one of the points in the court that it was not available in India. When the case was going on I have been told that patentee flooded the market with their products. Then the court went round and found that it was in the market and the case was rejected.

Now another example of the same institute is with regard to paludrine. They developed a process without any help, on their own. They asked the patentee, I think the ICI, to allow the manufacture of this particular product. They went on corresponding with regard to royalty, etc. It went on for five years and by the time it was resolved, malaria was more or less eradicated in this country.

Another thing with regard to Tolbutamide. The particular process is also absolutely original one. It is a process patented under our patents. But it has been found out that in Japan the same process has been put by a patentee as their process for patent in Japan. The matter could not be decided in the lower court; they had gone on appeal to the higher court.

-With regard to Tolbutamide tablets, the price was Rs. 300 or more. Today's price is about Rs. 183 per thousand tablets. The Hoffkine Institute prepared it on their own and without any help from the Hoechst and they sold it at Rs. 60 per kilo. Many people started selling it. Then notices started coming in and many have stopped it also. If you consider the requirement of this, it is a permanent requirement; it is an anti-diabetes drug; diabetes could not be cured; it can only be controlled by this product. It is controlled by this product. These are permanent requirements. The

present requirements are about 20 tons per year.

Shri Karmarkar: The case is going on in the court.

Dr. K. M. Parikh: Yes; the litigation is going on. Now, Hoffkine has been given a licence. When the Hoffkine Institute gives it at Rs. 60 per kilo it comes to Rs. 30 per thousand tablets. According to this, Indian firms were selling it at Rs. 50 for thousand tablets. Toray, Hoescht is selling it at Rs. 183. In July, 1961 it was Rs. 285. They are making a net profit of Rs. 150 on this drug. If it is Rs. 150 for 500 grams, it comes to Rs. 300 a kilo and Rs. 3 lakhs per ton, and for 20 tons, per year, it comes to about Rs. 60 lakhs a year. It should have been a little easier if it was shared by Hoffkine, and they would have earned quite a good amount and they would have further developed the research activities in their laboratory. But, instead of that, they are manufacturing same tablets for CSI; this is not economical, because in order to maintain their expenditure, the Government may not be able to grant them more money. While these advantages make the research laboratories flourish, it is not as if from the very beginning, a huge research laboratory has been established.

Shri Bibhuti Mishra: Are you in favour of bringing the drug industry into the public sector so that the poor people of our country may have cheapest medicine?

Dr. K. M. Parikh: I am not in favour of bringing it under the public sector, mainly because it is a very small industry. This is my individual opinion, and my firm has nothing to do with it. I personally feel that there is more of wastage and less of efficiency in the public administration. I am sorry to say it here. In the private undertaking, there is the question of owning it. It makes every individual work and the private sector gives proper attention in day-to-day matters. This industry is so small and we have

so many possibilities of changing the existing law a little here and there and through such changes, the Government can fully control the industry and bring the drugs for the use of the people at a very cheap price. If these changes are effected, definitely the country is going to get many products at very cheap prices. As you will see, chloroemphinicol is being sold by Indian small concerns at Rs. 3 per dozen against Rs. 11 per dozen by others. It is a great difference.

Shri Bibhuti Mishra: Are you in favour of having an appeal against the order of the Controller?

Dr. K. M. Parikh: In most of the cases, appeals are allowed but in some case, where delay is likely to take place, this delay is dangerous to the public, and an appeal in such cases should not be allowed. An appeal may be allowed to a tribunal appointed by the Central Government. The High Courts normally take more time and a lot of money is spent. I suggest a small tribunal to go into such questions, and on this tribunal, a judge may be represented.

Shri Bibhuti Mishra: Within what period, would you suggest, that an appeal should be decided?

Dr. K. M. Parikh: It depends on the court or the tribunal.

Shri Sham Lal Saraf: The hon. witness has made a number of points. Creating interest in research and inventive genius as far as drugs are concerned is absolutely necessary, and that alone will bring us to some stage of development as far as the pharmaceutical and drug industry is concerned. Making the drugs available at a lower or a cheaper price or a reasonable price is a different thing altogether. Do you agree that these are two separate things altogether? Therefore, do you agree that as far as the preservation of research and encouraging research and making the best medicines available to our countrymen, as far as possible, all efforts should be made?

Dr. K. M. Parikh: I have already made it clear.

Shri Sham Lal Saraf: If I have heard you aright, you said that it is only just a small percentage of the present-day patents are registered in name of Indian firms. On the contrary over 90 per cent of patents are registered in the name of foreigners. That being so, all the drugs, chemicals and pharmaceuticals that are sold in this country today are available because either you have got some know-how imported into this country or there is collaboration from firms outside this country.

Dr. K. M. Parikh: I do not agree with it completely, because all the drugs that are available in the country are not mainly manufactured elsewhere. There are manufacturers here, and they are able to manufacture because all the drugs are not patented. There are some which are being manufactured in India and they are sold in India in a free market by Indian concerns.

Shri Sham Lal Saraf: At the moment, the discussion is on patents. May I ask you how many drugs from your firm—which I know for years—have been patented and are sold out as patented drugs of your firm?

Dr. K. M. Parikh: It is only a negligible amount.

Shri Sham Lal Saraf: How many?

Dr. K. M. Parikh: 3:25 or 2:50. From my firm, there is not a single patent.

Shri Sham Lal Saraf: So, do I take it that the hon. witness has little experience about patented drugs?

Dr. K. M. Parikh: To have experience in obtaining and patenting the drugs is entirely different. What I say is, we are not given that opportunity to earn and invest on research as is given in the foreign countries; so that we could produce a sizeable research activity and manufacture medicines.

and drugs which could be patented and sold.

Shri Sham Lal Saraf: As far as procuring the drugs for the common man is concerned, everybody agrees that that they should be sold at a reasonable price. Do you agree that that change can be brought about if our administration is geared to that ideal?

Dr. K. M. Parikh: That change can be brought about.

Shri Sham Lal Saraf: You have said at one place that there is discrimination between pharmaceuticals or manufacturers within the country and those who manufacture with the collaboration of, or with imported know-how from, foreign countries. Could you explain that? You have also said that you are being threatened that some of your products would be seized when sold in the market. You have not said by whom you are being threatened and why. Could you please explain both these points?

Dr. K. M. Parikh: Some foreign collaborators are manufacturing some of the patented drugs here in India, and it is their monopoly. In the case of tolbutamide, we bought it from Hoffkine Institute and sold it, and we got a threatening letter, and we have to face court action in this matter.

Shri Sham Lal Saraf: At one place you say that the period in respect of the registration for your patents should be from three to five years. I should expect that you have some experience of research work and, so, may I know how much time, on an average, it takes for developing a genuine research skill in a properly equipped laboratory to find out a particular equipment and then work at it?

Dr. K. M. Parikh: To have an up-to-date pharmacological laboratory, I

require a lot of money. Today I have to sell in competition with foreign manufacturers who are already there with established names.

Shri Sham Lal Saraf: I was asking about the time factor, apart from the costs. Taking into account the time taken for completing the processes and then working it out and so on, to make it a patentable thing how much time would you ordinarily require?

Dr. K. M. Parikh: It varies from 1 year to 2 or 3 years. For example, this tolbutamide was a sulpha drug which was used for other purposes. By chance it was found that it lowered sugar in blood. After that, a little work will clearly bring out its properties.

Shri Sham Lal Saraf: Let us leave it to the committee to decide the period. Are you in favour of revoking a patent by a particular time and if so, under what circumstances should this revocation take place?

Dr. K. M. Parikh: If a limit is fixed for a patent, it should not be revoked before that. If the patent is not worked, there is already the provision of 'lenceces of Right'. If that is enforced, it will ensure that all patents are worked.

Shri D. P. Karmarkar: Your two principal points are that the patent clause has come in the way of development of Indian medicine and secondly, the prices charged here are enormous compared with the prices at which they are available outside. Do you agree that apart from some handicaps which arise on account of the fact that we have been backward in the development of modern medicine, in order to make India self-sufficient in medicine, for some time there would have to be foreign collaboration, even at a disadvantage?

Dr. K. M. Parikh: I am not at all against foreign collaboration.

Shri D. P. Karmarkar: When you agree that foreign collaboration will be necessary for some time, arising out of that, do you agree that the terms which we give for collaboration efforts should be not more than absolutely necessary for the purpose?

Dr. K. M. Parikh: That is true.

Shri D. P. Karmarkar: It is not saying anything uncomplimentary about the talents of our people, but on account of historical reasons, we have been slow in catching with modern medicine. Is it a fact that in the last 18 years, compared with the world, we have not come up to anything appreciable at all in the matter of inventions of medicines of large application?

Dr. K. M. Parikh: I would not agree with that completely. There are other factors which have worked against it. Otherwise, we could have come up to the expectations. If there had been free licence for 10 years, many of the concerns in India would have manufactured these things.

Shri D. P. Karmarkar: Do you agree that out of the medicines manufactured, medicines under patents are a very small percentage?

Dr. K. M. Parikh: Today they are very large.

Shri D. P. Karmarkar: I am speaking of medicines which cover a large field, not those used for small things, say, those covering about 70 per cent of the field.

Dr. K. M. Parikh: Most of the important drugs used by allopathic practitioners are patented.

Shri D. P. Karmarkar: Do you agree that amongst the drugs as a whole, during the last 15 or 20 years it is the sulpha drugs and antibiotics which have developed greatly?

Dr. K. M. Parikh: Yes.

Shri D. P. Karmarkar: In that, do you agree the foreign people have been responsible for these inventions?

Dr. K. M. Parikh: If chances had been given to this country, I am sure we would have also come up equally.

Shri D. P. Karmarkar: You mean by way of abrogation of patent law?

Dr. K. M. Parikh: That is one of the things.

Shri D. P. Karmarkar: Or by way of proper protection—either import control or helping with capital on technical know-how—you mean if the industry had been helped by these methods, they would have done it? So far as I know it is being helped.

Dr. K. M. Parikh: By chance I mean, in regard to things which can be very easily made by Indian concerns, licences should not have been granted to foreign manufacturers. Taking aspro, for example, the aspirin tablet which can be sold at Rs. 9 per thousand is being sold at about Rs. 60 or Rs. 70 per thousand. This is because of this foreign collaboration.

Shri D. P. Karmarkar: Is clause 87 of the present Bill completely satisfactory from your point of view?

Dr. K. M. Parikh: It is satisfactory, but I want a small change from ten years to seven years in clause 53. Then it will be more effective.

Shri D. P. Karmarkar: That is another matter. So far as clause 87 is concerned, is it not completely satisfactory?

Dr. K. M. Parikh: Yes; it is completely satisfactory.

Shri D. P. Karmarkar: Do you agree that whatever the concessions in law or in practice we want to give, they should be neither more than necessary nor less than necessary for that purpose? Suppose I am negotiating with a particular party. The

judgments may vary, but do you agree that in order to serve the purpose, the terms should be neither more generous nor less generous than is necessary for the purpose?

Dr. K. M. Parikh: For foreign patents or Indian?

Shri D. P. Karmarkar: Both.

Dr. K. M. Parikh: For foreign patents, it should not be more; it should be less. For Indian patents, it should be more.

Shri D. P. Karmarkar: Even if we find that foreign collaboration is absolutely necessary for the country, you think that the period should be less than what is absolutely necessary, you think that the period should be less for foreign collaboration and more for Indian firms?

Dr. K. M. Parikh: Yes, provided other facilities . . .

Shri D. P. Karmarkar: I am not speaking about facilities at all. This Bill does not deal with facilities. The Industries (Development) Act deals with facilities like free land, free capital and all that. This Bill deals with certain concessions given to certain producing units either here or abroad. One of the things is tenure. Opinions may vary. One may say that it should be five years and another may say that it should be two years. Do you agree that on a balance with what we offer for the development of industries it should neither be too niggardly nor too generous?

Dr. K. M. Parikh: Yes.

Shri M. L. Jadhav: In India the cost of labour is low as compared to other countries while the cost of even indigenous medicines is very high. What have you to say about that?

Dr. K. M. Parikh: The term "high" is a very relative term because it goes

with so many other things. I take it that by indigenous medicines you mean foreign drugs produced in India. I have already submitted a whole list. You will notice that they are sold at rock bottom prices and at the highest possible prices. It varies from company to company and some take advantage of certain things.

Shri Kashi Ram Gupta: You mentioned just now that medical practitioners in India use a large portion of patented drugs. What is your opinion about the use of drugs in government hospitals, whether they also use a large portion of patented drugs?

Dr. K. M. Parikh: It is the same thing everywhere. I may give just one example. When a hospital wants Sulphathiazol instead of writing that they prefer to write Cibazol which is a patented drug of a particular firm and they insist on getting that only.

Shri Kashi Ram Gupta: You have suggested a period of seven years. From the note we understand that it is 7 years from the date of the patent whereas you now say that it is from the date of the application. You know that the Patents Office may take some years to finalise it. Suppose it takes seven years to finalise it, then there is no time left.

Dr. K. M. Parikh: It varies. In the case of Tolbutamide it was done in 1954 and marketed immediately. Thereafter if a period of 7 years is given, I think that would be enough. The Patent Office should not take such a long time. If there is no restriction put in the present Bill on the time that the Patent Office can take, it should be done now.

Shri Kashi Ram Gupta: You have put the rate of royalty at 7½ per cent while in the Bill only 4 per cent is provided. What is your reason for raising it?

Dr. K. M. Parikh: I feel that those who are inventors should get a fair

return. Even if 7½ per cent is given I feel that it will be a fair amount.

Shri Kashi Ram Gupta: I invite your attention to the Memorandum of your managing agents, Mr. G. M. Parikh for Jagat Ram and company, wherein they have put down only 4 per cent.

Dr. K. M. Parikh: I know that.

Shri Kashi Ram Gupta: On page 2 of your memorandum you have given the example of Italy and Japan. How many years did it take Italy or Japan to bring in the Patent Act?

Dr. K. M. Parikh: I do not know. I think in Italy it was done recently.

Shri Kashi Ram Gupta: Only yesterday the Japanese industrialists have come out saying that they are against the present Patent Bill of India.

Dr. K. M. Parikh: It might be a timed one.

Shri Kashi Ram Gupta: You have said on page 2:

"In order to achieve these twin objectives, the best and the only way out is to abrogate the Patents completely till we develop to such a stage when we can enter this convention.

What is your idea about "till we develop"? When do you think we can consider ourselves to have sufficiently developed? How can you measure that?

Dr. K. M. Parikh: I think 10 to 15 years will be enough for development. Once there is no Patent, even American manufacturers will be ready to collaborate with us for giving the know-how etc.

Shri Kashi Ram Gupta: You have given a list of liquids, ointments and powders of Zandu Pharmaceutical works. This means that although

these are unpatented so far as Zandu works are concerned, in the case of other firms they are patented.

Dr. K. M. Parikh: I am just telling the class of medicines and not of any particular product. I have only said that our processing capacity for liquids is this.

Shri Kashi Ram Gupta: You have put in liquids, ointments and powders of Glaxos. Are they patented or not?

Dr. K. M. Parikh: They include both. I have given the manufacturing capacities of these pharmaceutical preparations.

Shri Kashi Ram Gupta: Now, the old patents are there. We are fast developing and they may be but of use. In any case they have made a lot of profit. Are you in favour of revoking all those patents?

Dr. K. M. Parikh: Who is to decide whether they have made enough profit? It can be generally decided on the basis of the number of years.

Shri Kashi Ram Gupta: When you say that 7 years is enough you think that 7 years is enough to give him the expenses of research and also a good living to him, and after this Bill comes into an. Act all those old patents must be revoked?

Dr. K. M. Parikh: All those that are more than 7 years should be revoked.

Shri Kashi Ram Gupta: You have given an idea about your firm. Are there such firms in India whose patents are working in a good way and they are also in favour of abrogation of all patents for the time being?

Dr. K. M. Parikh: I do not know of any Indian firm having patents except one or two in Bengal and one here.

Shri Kashi Ram Gupta: Therefore, that is one of the reasons why this abrogation is sought.

Dr. K. M. Parikh: It is in the national interest.

Shri K. K. Warior: What percentage of the total sale proceeds of your firm is reserved for research work?

Dr. K. M. Parikh: We have not allotted any specific amount. As and when we require it, we go on spending it. At present we are spending a very small amount.

Shri K. K. Warior: What will be the approximate percentage?

Dr. K. M. Parikh: About one per cent.

Shri K. K. Warior: Do you agree with the view that if patent rights are not given there is every chance of many spurious drugs being manufactured?

Dr. K. M. Parikh: No, I do not agree. Because, there is strict drug control administration in this country.

Shri K. K. Warior: Do you not agree that spurious drugs are being manufactured?

Dr. K. M. Parikh: They are manufactured even in the United States. It is something which no one has been able to stop the world over.

Shri K. K. Warior: What will be the approximate profit range of the Indian manufacturers without any collaboration?

Dr. K. M. Parikh: Normally, the profit range of the Indian concern is much less than that of the foreign companies. The cost of raw materials multiplied by twenty will be the standard for foreign concerns. In the case of Indian concerns, if chlorophenical is sold for Rs. 3 it may be only two times

Shri K. K. Warior: If the foreign collaborators are not given patent rights do you think that indigenous manufacturers would be able to cope with the demand?

Dr. K. M. Parikh: Yes, I am confident.

Shri Daljit Singh: Is there any objection if there is a provision for expropriation of patent rights or acquisition of invention by Government?

Dr. K. M. Parikh: I have not studied it so thoroughly. So, I have nothing special to mention about it.

Shri Daljit Singh: You said that there is a vast difference in price between the products of Indian patentees and patentees with foreign collaboration. But is there any difference in quality of the product or process of manufacture?

Dr. K. M. Parikh: No difference. The quality is the same.

Shri Daljit Singh: Then why is it that people do not prefer to buy Indian manufactured products?

Dr. K. M. Parikh: That is individual preference. I cannot explain it.

Shri P. K. Kumaran: In Italy there has been no patent system. Some people hold that the absence of patent system did not encourage the invention of medicines in Italy, for the same although they have been manufacturing a large number of medicines and have been often introducing 20 to 30 variations of the medicines introduced by foreign firms.

Dr. K. M. Parikh: I do not agree there. In Italy they have also found out many of the products which are under trial. Many products have been invented in Italy even in the absence of patents. Even when there was no patent law many things were found out by the foreign countries.

Shri P. K. Kumaran: Is it not a fact that the Italian industry was able to sell its product at lower price than the international market price?

Dr. K. M. Parikh: Yes, they were able to sell even to England, a country which has a patent law.

Shri A. T. Sarma: I was under the impression that your firm is dealing with Ayurvedic pharmaceuticals also.

Dr. K. M. Parikh: We have dealings with allopathy, biological and Ayurved.

Shri A. T. Sarma: But you have not mentioned about Ayurved in your written speech. Do you not think that Ayurvedic medicines also require patents?

Dr. K. M. Parikh: We need not bother about Ayurved because this is the only country which is producing Ayurvedic medicines.

Shri A. T. Sarma: What is your opinion about it?

Dr. K. M. Parikh: It is a very big problem on which I have definite ideas. I have given some lectures on this subject.

Shri A. T. Sarma: Do you think that the provisions of this Bill are beneficial to Ayurved?

Dr. K. M. Parikh: For example, CIBA is doing research on reserpin which is the same as sarpagandha in Ayurved. The thing to remember is if the medicine is prepared in a fine finished form it will have a wider market while if it is in a coarse form, as it exists today, it will have very little market. Therefore, so far as the properties of the medicines are concerned, they should be scientifically explainable by the action of the drug etc.

Shri A. T. Sarma: I am not talking about the medicine. I am asking about the process of research work in Ayurved.

Dr. K. M. Parikh: If a firm deviates from the old process in Ayurved, immediately the vaid criticsise it by saying that it is going against the old and well-established Ayurvedic traditions. Many of the vaid may not like it. That is why there is no progress in that field.

Shri A. T. Sarma: I was thinking about Makaradwaja.

Mr. Chairman: Anyhow, that is not the matter under discussion here.

Shri A. T. Sarma: I want to know whether any special provisions are necessary in the Bill for improving Ayurved.

Dr. K. M. Parikh: As we are the only country practising Ayurved, I do not think it is necessary. If it is included in the Bill, there is nothing wrong either.

Shri A. T. Sarma: So, you are not against its inclusion?

Dr. K. M. Parikh: No, I am not against it.

Shri A. T. Sarma: You have mentioned that you anticipated the Bill earlier and that it has come in a mutilated form. What is the meaning of it?

Dr. K. M. Parikh: I have discussed the two points—seven year period and abolition of patents. I think, abrogation will serve the interests of this country much better. But as we have already patentees in India, having big factories and everything, perhaps it may not be possible so to combine two ideas and to come to an amicable settlement. If the period is limited and licence is given, it will be a better solution.

Shri A. T. Sarma: In your memorandum you have stated that some safeguards are needed to protect the interests of Indian drugs. What do you mean by that and what safeguards do you want?

Dr. K. M. Parikh: I do not think so.

Shri Veeranna Gowdh: It is stated that the period should not be more than 7 years while in the Bill it is stated as ten years. What is your opinion if a period of only five years is fixed?

Dr. K. M. Parikh: It can be anything. The exploitation period should be as low as possible so that it gives them enough opportunity to recoup their expenses as they say and, at the same time, it should not give them a longer duration for exploitation. In genuine cases, I have already suggested, an extension of three years may be granted.

Shri Veeranna Gowdh: In your opinion royalty should be about 7½ per cent, not more than that, while in the Bill it is 4 per cent. Suppose, no percentage is fixed and each case is dealt with separately?

Dr. K. M. Parikh: It may delay the matter. As I told you in the case of the Haffkine Institute Paludrine was delayed for fixing up the royalty. After five years they got the permission. So, there must be some period fixed.

श्री ब्रज बिहारी मेहरोत्रा : आपने जितना स्टेटमेंट किया है वह दवाओं को सामने रख कर किया है लेकिन अगर कोई और चीज का उत्पादन हो, छोटे इम्प्लीमेंट्स एग्रीकलचर के या ऐसे इम्प्लीमेंट्स जो जनता को बड़े पैमाने पर काम दे सकें और उसमें इनवैस्टमेंट ज्यादा होगा तो फिर उसमें भी आप चाहेंगे कि चार वर्ष की ही यह अवधि रखी जाय ?

डा० के० एम० पारीख : मैं उसके लिए कुछ नहीं बतला सकता ।

श्री ब्रज बिहारी मेहरोत्रा : आप चाहते हैं कि संरक्षण में भेद रखा जाय

डा० के० एम० पारीख : जहां जहां अपनी प्रजा और समाज को जरूरत हो

वहां वहां भेद रखा जाय लेकिन जहां जरूरत न हो वहां एक ही रखा जाय ।

श्री ब्रज बिहारी मेहरोत्रा : दूसरी चीज आप ने यह कही कि भारतीय चीजों का जहां उत्पादन होता है उनमें और विदेशी चीजों के उत्पादन में संरक्षण में ही भेद रखा जाय तो इससे क्या आप समझते नहीं हैं कि विदेशी लोग आकर उसका फायदा उठाते रहेंगे ?

डा० के० एम० पारीख : मैं ऐसा नहीं कहता । मेरा कहना ऐसा था कि जो हमारा भारतीय उत्पादन होता है वह चीज विदेशों से हमें नहीं लेनी चाहिए । अब जिनका भारतीय उत्पादन होता नहीं है और जिनकी आवश्यकता है तो विदेशी क्यों नहीं लेना चाहिए ।

श्री ब्रज बिहारी मेहरोत्रा : विदेशी चीजें ऐसी हैं जोकि विदेशों ने आविष्कार की हैं, उन्होंने अनुसन्धान किया है और वह आप के देश में आती हैं और अगर वह आपके देश में नहीं बनती हैं तो जाहिर है कि आपको उन्हें वहां से महंगे दामों पर खरीदना पड़ेगा ।

डा० के० एम० पारीख : जब वह चीज हमारे देश में नहीं बनती हैं और वे आवश्यक हैं तो उनको जरूर लेना चाहिए ।

श्री ब्रज बिहारी मेहरोत्रा : वह जो संरक्षण का भेद आप चाहते हैं वह कैसे रहेगा ?

डा० के० एम० पारीख : मैंने ऐसा भेद नहीं चाहा है । जो चीजें जरूरी हों और जो यहां नहीं बनती हों उनको वहां से लेना चाहिए अलबत्ता अनावश्यक चीजें यहां बाहर से नहीं लानी चाहिए ।

श्री ब्रज बिहारी मेहरोत्रा : मवान तो जरूरी चीजों का ही है अब मिट्टी का कौन पेटेंट चाहता है ।

डा० के० एम० पारीख : जिनका उत्पादन यहां होता है उनको बाहर से नहीं लाना है ।

श्री ब्रज बिहारी मेहरोत्रा : क्या यह सही नहीं है कि आपने अपनी फर्म को सामने रख कर ऐसा कहा है चूंकि आपकी एक बड़ी मशहूर फर्म है बहुत सी चीजें मैन्युफैक्चर करती है इसलिए पेटेंट का समय इतना कम रखा है कि आप उसको एक्सप्लॉट कर सकें ?

डा० के० एम० पारीख : वह तो पेटेंट ग्रांट करने का एक सिद्धान्त है चाहे वह पेटेंट ग्रांट 7 साल हो, 10 साल हो या 20 साल हो । जिसे पेटेंट ग्रांट मिलती है वही अपना इन्वेन्शन डिस्क्लोज करता है पब्लिक को बताता है और यह नम्बर ऑफ़ इयर्स जो रखा है उसका प्रयोजन ही यह है कि सात साल के बाद वह कर सकता है ।

Shri Peter Alvares: You have been arguing for some time that if the patents are progressively abolished it would be an incentive for Indian industry to develop. If the patents are entirely abolished, that would mean that there would be no protection for Indian industry if by chance you develop an invention yourself. As an investor in the private sector, are you agreeable to this position?

Dr. K. M. Parikh: I think, inventions are not made mainly by beginners and other people with the intention of patent protection only. They are done because it is a creative desire of man. The name is more important than financial gains.

Shri Peter Alvares: Therefore you are of opinion that even when Indian industry comes of age or is competent enough, even in those circumstances the Indian pharmaceutical industry is not in favour of any protection of patents.

Dr. K. M. Parikh: It may be a commercial aspect, as Italy is entering into today. If the people of this country feel like it, they may enter into it at that time.

Shri Peter Alvares: You are not sure about it. You are the first chemist here as a witness. There is a distinction sought to be made between protection of a product and protection of a process. I want to know from your experience or from the experience of the world, whether this distinction is real or whether it is possible to develop a particular product by a process other than the one patented. Are there theoretically or in practice various ways of arriving at a product? If it is so, it is understandable; but if it is difficult or impossible in practice to arrive at a particular product by any other process, the distinction is only national.

Dr. K. M. Parikh: There is a possibility. The same product can be prepared by more than one process. The Haffkine Institute is a Government institute and their process is open to everybody. Anybody can go and see it.

Shri Peter Alvares: If there are various possibilities of arriving at the product by various other methods, what is the great objection to industrial or pharmaceutical patent?

Dr. K. M. Parikh: All the processes are covered by the specifications and I cannot do it. Here I have a patent of Hoechst which contains 13 process and runs into 56 pages. It has covered all the possible sulphonylureas and all the possible and conceivable processes.

Shri S. N. Mishra: What is the number of Indian patents in the field of drugs?

Dr. K. M. Parikh: I may not be knowing the exact figures but it may be 2.5 to 3.5 per cent. That will, however, include such type of patents which are also challenged.

Shri S. N. Mishra: That means, 97 per cent is the number of foreign patents.

Dr. K. M. Parikh: Yes, Sir.

Shri S. N. Mishra: Why are Indian patents not coming up? What is the

practical difficulty in the way of Indian patents coming up?

Dr. K. M. Parikh: I gave a solid example of the Haffkine Institute. If they had been allowed to do their patent, they would have earned so much money that they could have built a very huge research laboratory and then only the results would come out. To do research is not one or two individual's job.

Mr. Chairman: Is it the current patent law that is in the way?

Dr. K. M. Parikh: To an extent, yes.

Shri S. N. Mishra: How many of these 2.5 to 3.5 per cent patents belong to the private sector?

Dr. K. M. Parikh: I do not know.

Shri S. N. Mishra: Normally, the assumption would be that the private sector is not so well-equipped for the kinds of inventions which are required. If that is the present position, how do you think that you can displace the large number of patents that are granted to the foreigners?

Dr. K. M. Parikh: I do not know about the first part of it . . .

Shri S. N. Mishra: You are not able to get at my point. The assumption would be that the Indian industry is not well-equipped to undertake inventions because of lack of resources or maybe because of lack of talent and so on. Is that assumption correct or is it something else which is coming in the way of the Indian patents coming up?

Dr. K. M. Parikh: It is quite right that if the patents are to be worked out, the finance and other things are required. If a little assistance is given, more and more patents will be worked out.

Shri S. N. Mishra: Do you want the resources to be provided by the Government?

Dr. K. M. Parikh: It will be very difficult for the Government to provide such huge amounts . . .

Mr. Chairman: What is the assistance that you want? That is what you said.

Dr. K. M. Parikh: Assistance, in the sense, to protect the Indian industry in selling their products, etc. so that instead of having competition with other people and selling the products at a low price, they can make a little more money and spend more on it.

Mr. Chairman: You want to introduce Indian monopoly instead of foreign monopoly.

Dr. K. M. Parikh: That is not my submission. As we see, there is a difference of Rs. 150 as profit on a particular product and the Indian capitalist may not take that much but, say, Rs. 20 or Rs. 30 or Rs. 40 which may be utilised for the research.

Shrimati Sharda Mukerjee: From your evidence what I gather is that what seems to be in the way of further research in India is the lack of well-equipped laboratories. Is that not so?

Dr. K. M. Parikh: There are many laboratories which are well-equipped. But further expansion of the laboratories is needed.

Shrimati Sharda Mukerjee: More research is held up due to lack of more facilities.

Dr. K. M. Parikh: By virtue of having more facilities, that is, more and more good laboratories, there will be more people working into them taking up more problems at a time. Today, they may be able to take up a few problems out of which only 3 or 4 may show results.

Shrimati Sharda Mukerjee: There are many processes which are well-known and which are not patentable.

May I know why we have not been able to adopt those processes here and make medicines or even other products of the same standard as obtains in the case of goods which we import?

Dr. K. M. Parikh: The Indian industry is preparing quite a large number of chemicals which are not patentable.

Shrimati Sharda Mukerjee: Why have we not been able to obtain the same standard in the case of medicines or other products?

Dr. K. M. Parikh: Our standard is the same . . .

Shrimati Sharda Mukerjee: Not in every case.

Dr. K. M. Parikh: I would say every case. Whatever drawbacks are there, they are common to both foreign or Indian.

Shrimati Sharda Mukerjee: It has been the experience that where special protection has been given to the Indian industry, the prices have shot up and neither the quantity of commodity available to the market nor the quality has improved.

Dr. K. M. Parikh: There can be a number of factors, namely, the short supply of commodities, the profit element and a number of other factors can also be there.

Shrimati Sharda Mukerjee: Therefore, if we were to abolish patents, it may not necessarily help the drug industry.

Dr. K. M. Parikh: It will help so far as patented drugs are concerned.

Shrimati Sharda Mukerjee: What is the percentage of patented drugs in India? We were told that 3 to 4 per cent of the drugs used in India are patentable.

Dr. K. M. Parikh: If you take all the drugs available . . .

Shrimati Sharda Mukerjee: Out of the drugs which are in use today, what percentage of them are patented?

Dr. K. M. Parikh: There may be some obsolete things which may be in use somewhere in the country . . .

Shrimati Sharda Mukerjee: You take the drugs which are in use today. What is your assessment?

Dr. K. M. Parikh: It will be 40 to 50 per cent.

Shrimati Sharda Mukerjee: We were told that it is only about 4 per cent.

Dr. K. M. Parikh: That is how I have calculated.

Shri V. B. Gandhi: You suggested that the term of patents should be 7 years. As an experienced businessman holding responsible position in a very large Indian firm, you should be able to tell us how it can be worked in 7 years. As you know, before a drug can be put on the market, it requires a chemical trial and all sorts of other trials. The Government requires that it should undergo a thorough trial. It takes some time to obtain an industrial licence. Also, as you know, sometime is taken for marketing the product. Of course, there are some products which were lucky enough to be successful immediately, like, chylromycetin or such other products. But that good luck cannot be expected in every case. So, considering the requirements of chemical trials insisted by the Government and the time taken for marketing and so on, would you not like to reconsider your suggestion?

Mr. Chairman: He has already given the answer.

Dr. K. M. Parikh: The period of 3 years is enough for recouping the expenditure while the period of 4 years is enough for other things. In the case of a really genuine case, it may be given an extension.

Shri V. B. Gandhi: About the prices, it seems everybody wants to blame the present high prices of the patented products in India as Shri-mati Sharda Mukerjee and Shri Karmarkar also pointed it out. Actually, the percentage of the products that are patented in India, according to our information received from our responsible source which we have every reason to believe, is not in excess of $2\frac{1}{2}$ per cent to 3 per cent. So, what applies to $2\frac{1}{2}$ per cent or 3 per cent should not be enough to push up the entire level of prices. The prices of other products which are not patented have gone up. The prices of all other products, even non-medical, have gone up; the toilet soap, Hamam, used to be sold at only 5 annas but now the price has gone up to 8 or 10 annas; the ENOS fruit salt—not patented I hope—which used to be available for Rs. 3 now costs Rs. 6. So we cannot throw the blame for high prices only on the existence of patents.

Dr. K. M. Parikh: It is not a question of high price only; it is a question of exorbitantly high price. This thing happens only when monopoly in some way is created and one of the ways is patent.

Shri R. P. Sinha: Without good chemical engineering we cannot make use of patents even if they are available to us free because it is not only the know-how, but the chemical engineering has not developed to a stage where what you do in the laboratory can be translated into practice. So, in your opinion, what is the stage of chemical engineering that we can take advantage of the patent only provided even the know-how was not available to us or we will have to pay for the know-how.

Dr. K. M. Parikh: We are fairly developed in chemical engineering. Moreover, chemical engineering is a thing which can be bought from any country. We can go out to an American firm of chemical engineering

and get the plants; there will be payment only once.

Shri R. P. Sinha: Some of the chemical pharmaceutical manufacturers abroad met us as doctors and they said that, if they were to withhold the know-how when the patent law is changed, then India would suffer. What do you think about this?

Dr. K. M. Parikh: I do not agree with it because the technical know-how is fairly available. Most of the chemical processes are of a common nature with very little difference. Secondly, these foreign collaborators employ a number of scientists at very high remuneration and I do not know how far they have really learnt it; the things come straight from there and they have to act according to what is written down there.

Shri R. P. Sinha: The sales promotion forms a major expenditure item as compared to research. What, in your opinion, those firms which are here either as collaborators or manufacturers are spending, as a percentage, on the sales promotion and on research?

Dr. K. M. Parikh: Sales promotion is essential and they spend money on it. How much they are doing in India, I do not know, but I can say from the figures elsewhere that the expenditure on sales promotion is fairly very high compared to the expenditure on research.

Shri R. P. Sinha: If the expenditure on sales promotion is cut down from 25 or 30 per cent to 10 per cent, then there will be reduction in the prices. What have you to say on this?

Dr. K. M. Parikh: That is only one aspect, but it will not bring us technology which we are very much wanting.

Shri R. P. Sinha: The Indian firms have to compete with foreign firms. The foreign firms have better means of detailing sales promotion with the result that the Indian firms' goods do

not get the same stamp of respectability as those of foreign firms. As you say, the Indian firms are working at a very meagre margin. So in order to bridge this gap between foreign and Indian firms, the only thing that can be done is to cut down this expenditure. What do you say about this?

Dr. K. M. Parikh: Instead of that, my suggestion would be that we should divide: wherever the Indian firms can do, the field should be open to them; why should there be any competition?

Shri Bibudhendra Mishra: For the information of the members, I may tell about the percentages as given by the Drugs Controller.

Out of the total mass of medicines used in the country, about 60 to 65 per cent is patented, but out of the total number of patentees, the number of Indian patentees is somewhere in the region of 2.5 to 3 per cent.

Shri D. P. Karmarkar: In other words, 65 per cent are alive today.

Shri S. K. Borkar: Of the drugs which are available in the market, 65 per cent constitute those which are patented.

Shri D. P. Karmarkar: Of this 60 or 65 per cent, how many cover 70 or 80 per cent of the field?

Shri S. K. Borkar: I can say that about five groups of drugs constitute about 80 per cent of the consumption.

Shri Bade: You have said in your Memorandum that we should abolish this Patent Bill. But now you have climbed down to this level, namely, instead of abolishing, we should have some curbs on the foreign firms. We have got the Model laws in which it is said that, if this Act was made retrospective—some countries have done like this—the deve-

loped countries cannot send their know-how to the under-developed countries and, therefore, there should be no compulsory licensing.

Dr. K. M. Parikh: Even today what is the know-how they have given to us—from the example of Tolbutamide.

Shri Bade: We shall compel them.

Dr. K. M. Parikh: How far is it proper or how far is it correct?

Shri Bade: According to the Bill, only processes would be patented and not the product. Suppose the processes are patented and according to one process, they are manufacturing the product, the other processes will be sealed. Is it not a fact.

Dr. K. M. Parikh: The other processes will be open for others.

Shri Bade: According to this Bill, only processes can be patented. Suppose they have patented ten processes and they are using only one process, then the other processes will be sealed out.

Dr. K. M. Parikh: Therefore, it was my submission that one process should be sealed and the others should be kept open.

Shri Bade: There is a provision in the Bill; it will be sealed for three years.

Mr. Chairman: If they want to manufacture with other processes, they must take patents for those processes also.

Shri Bade: So there should be that amendment here; if they are not using the other processes, they should be open to the public.

Dr. K. M. Parikh: Only one process should be mentioned.

Shri Bade: Regarding the period, you have said that it should be 3 or

5 years. We are also a party to the Model Laws; our representative was there and we have said that the period should be only 10 or 14 years. If you say that it should be 3 or 5 years, then we should give them some royalty.

Dr. K. M. Parikh: We can revise our thinking.

Shri Bade: How can you make it retrospective without giving them compensation or royalty or damages?

Dr. K. M. Parikh: It is not that question. The Bill, which will come into force is there. They are enjoying patent under the new Bill also.

Shri Bade: The section is quite clear. Same royalty should be given to them.

Dr. K. M. Parikh: They have already provided 4 per cent. I am suggesting 7 per cent.

Shri Bade: That is all right.

श्री चौरड़िया : आपने कहा है कि जापान ने बड़ी तरक्की की है। मैं जानना चाहता हूँ कि अपने यहां नो हऊ लाने के लिए आप क्या प्रयत्न करेंगे ?

डा० के० एम० पारीख : अपने यहां भी नो हऊ ला सकते हैं

श्री चौरड़िया : आपको शुरुआत करने में क्या कठिनाई है ?

Dr. K. M. Parikh: We can buy this know-how and get this know-how also but we have got our know-how in our country. The case is such that we have got enough know-how to start within our country.

श्री चौरड़िया : अपने यहां के नो हऊ का ठीक तरह से उपयोग करने के लिए

और इन्वेंटर को ठीक तरह से लाभ पहुंचाने के लिए यह आवश्यक है कि कानून दोनों के हितों की रक्षा करे। क्या आप कानून को उस ढंग से बनाने के पक्षपाती हैं जिससे अपने नो हऊ का भी उपयोग ठीक से हो और इन्वेंटर को भी प्रोटेक्शन मिले ?

डा० के० एम० पारीख : इसीलिए मैंने सात साल का प्रस्ताव किया है।

श्री चौरड़िया : एक तरफ आप कानून बनाने के पक्ष में नहीं हैं, दूसरी तरफ आप चाहते हैं कि कानून बने तो सात साल की अवधि उसमें रहे। अगर इन्वेंटर को प्रोटेक्शन देना है तो जैसा कानून में दस बरस रखा गया है उससे उसे ज्यादा प्रोटेक्शन मिलेगा या कम मिलेगा ? मेरे खयाल में तो ज्यादा मिलेगा।

डा० के० एम० पारीख : पेटेंट्रिड प्रोडक्ट्स बनाने में अभी थोड़ी देर लगेगी। खुद अपना पेटेंट निकाल सकें, इसमें थोड़ी देर लगेगी। एक दम से दौड़ा नहीं जा सकता है। पहले आहिस्ता आहिस्ता चलना सीखना होता है और उसके बाद दौड़ना सीखा जा सकता है।

श्री चौरड़िया : मैंने यह सवाल किया है कि नो हऊ को उपयोग में लाने के लिए सात साल के बजाय दस साल तक प्रोटेक्शन दी जाये तो वह हमारे हित में होगा या अहित में ?

डा० के० एम० पारीख : प्रोटेक्शन उसी चीज में हो सकता है जहां पहले वह चीज पेटेंट हो चुकी है। अलग तरीके से बनती है पेटेंट की वजह से तो उपयोग नहीं कर सकते हैं

श्री बड़ें : दस ग्यारह साल लगते हैं प्रोड्यूस करने के लिए अगर कानून में पीरियड के ऊपर कंट्रोल हो जाये तो क्या हरज है ?

डा० के० एम० पारीखः अच्छी चीज है।

श्री चोरड़िया : सात साल का पीरियड रखा गया है और कहीं कहीं अगर एक्सपेंशन देने की जरूरत हो तो क्या आप उसके हक में हैं ताकि कुर्रप्शन की सम्भावना ज्यादा न रहे ?

डा० के० एम० पारीख : मैंने सजैस्ट किया है कि अगर कोई जैन्ड्रुन केस हो और एक्सपेंशन देने की जरूरत हो तो तीन साल का दे दिया जाये।

Shri Bade: That is not in the Bill.

Dr. K. M. Parikh: This is indirectly a control. It is valid for 7 years. If I know the same know-how I will go for licence and I will manufacture the same. I will utilise my know-how.

Shri P. C. Borooah: You support the bill in toto. What steps you would suggest to encourage inventions?

Dr. K. M. Parikh: It depends on the development of the country and the country's inventive capacities. Today America or England need this patent bill. India may not require to that extent.

Shri R. Ramanathan Chettiar: While he mentioned about the period of 7 years may I ask him whether it is his contention that this will curb the monopolistic tendencies in the drug and pharmaceutical industry and also bring down the price level of drugs in the country?

Dr. K. M. Parikh: Yes. It will definitely bring it down.

Shri Basanta Kumar Das: I understand that under the present circumstances if this law is enacted then it will be of some disincentive to foreigners to transfer their know-how to us.

Dr. K. M. Parikh: It will curb the period of exploitation, or area of exploitation.

Shri Basanta Kumar Das: Do you think it will not stop know-how?

Dr. K. M. Parikh: It will not stop know-how. It will flow.

Mr. Chairman: You said that the same period for drugs may be fixed as 3 or 5 or 7 years. Some of the witnesses who came before us told us that this discrimination should not be made between drugs and other patents. Is there any such discrimination existing in other countries?

Dr. K. M. Parikh: In some other countries pharmaceutical and drugs are treated on a special level. Even in England compulsory licence is allowed for drugs and medicines.

Mr. Chairman: What is the period fixed for that?

Dr. K. M. Parikh: I don't know much . . .

Mr. Chairman: You gave a table and said that the c.i.f. prices of drugs were far below the local manufactured prices here. What would be your remedy to control those prices? What would be your reaction?

Dr. K. M. Parikh: Allow others to manufacture. It will bring down prices.

Mr. Chairman: It has been stated to us that in spite of the patent law being there for so many years, India has not taken advantage of that.

Dr. K. M. Parikh: In law we have to take the licence and then only we can manufacture. They take so much time in giving terms and then in correspondence and all these things.

Mr. Chairman: You quoted one item where the price of Indian manufacture was Rs. 3 and the price of foreign manufacturer was Rs. 11. Do you

agree that the standard of the two drugs are the same?

Dr. K. M. Parikh: Absolutely same. You can send to any chemical or clinical laboratory for test. It will come to same standards. Basic material is purchased from the same source.

Mr. Chairman: You said that nothing new has developed in this country. Some witnesses have said that the foreign collaborators have helped us with these modern medicines and patented drugs and if these restrictions were to be placed that much of know-how may not be forthcoming to the Indian manufacturers.

Dr. K. M. Parikh: They are helped in the sense that we pay exorbitant price, much higher price than the price prevailing in their own home country.

Mr. Chairman: It is our mistake.

Dr. K. M. Parikh: Our law and our regulations are such that they get all this benefit.

Mr. Chairman: If we do not pay, they won't make such profits. This is a matter for negotiation.

Dr. K. M. Parikh: That is because they are the monopolist under our existing patent law. When the Doctor writes a particular preparation, the patent goes to the chemist and gets it without enquiring the price.

Mr. Chairman: Do you agree by and large with the provisions of the Bill that is now being proposed?

Dr. K. M. Parikh: I fully agree with it except a few modifications about the term of patents.

Shri R. Ramanathan Chettiar: The pharmaceutical industry has been in existence for over 20 years now. Have you made any attempt to have a Research Institute just like the Textile Research Institute in a collective way?

Dr. K. M. Parikh: I feel that in this industry there is no chance for collective research.

Shri R. Ramanathan Chettiar: I want to ask you whether you have explored the possibilities of putting a small percentage towards development of research, which would go to make a fund and you may create a Research Institute for the benefit of the whole industry, not only to individual users.

Dr. K. M. Parikh: If a new substance is found out in a collective laboratory, who will be the owner of it to exploit it commercially?

Shri R. Ramanathan Chettiar: In 1962-63, according to a survey conducted by the Reserve Bank of India, out of 14 crores invested by foreign interests in this country, they have taken away Rs. 7 crores—Rs. 2 crores as dividend remittances and Rs. 5 crores as royalties. The facts are there. If you want to curb the growth of indigenous industry and also want to curb the growth of foreign interests, this is one of the methods. Why don't you explore the possibility?

Dr. K. M. Parikh: We will do that.

Shri D. P. Karmarkar: You have stated that the term of patent should be seven years instead of 10 years from the date of patent with regards to Food, Medicines, etc. You feel that seven years is enough a period for recouping the expenses and particularly that is so in these days of fast development. In the case of existing patents, in the proposed Bill provision is there giving retrospective effect as soon as the Act comes into force. In the case of new patents, so far as medicines and pharmaceuticals are concerned, if the person is in a position to develop a patent for which he is given a licence and to manufacture it, why should you worry about this period of 7 years?

Dr. K. M. Parikh: I am suggesting this period of 7 years even in the case of existing patents in order to stop the high prices and exploitation of a particular firm.

Shri D. P. Karmarkar: If the price is otherwise regulated?

Dr. K. M. Parikh: Then ten year period is all right.

Mr. Chairman: There is another point. Certain patents have already been taken; they have got the right now. By taking recourse to this, if

you revoke that, people will go to the Supreme Court.

Dr. K. M. Parikh: I feel that the Government has all the rights to change the number of years in the national interest. The existing people have had all the benefit for all these years now.

Mr. Chairman: Thank you, Mr. Parikh:

(The witness then withdrew)

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1965

Tuesday, the 1st February, 1966 at 14.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri P. C. Borooh.
7. Sardar Daljit Singh.
8. Shri Basanta Kumar Das.
9. Shri V. B. Gandhi.
10. Shri H. K. V. Gowdh.
11. Shri Kashi Ram Gupta.
12. Shri Madhavrao Laxmanrao Jadhav.
13. Shri Mathew Maniyangadan.
14. Shri Braj Behari Mehrotra.
- 14A. Shri Bibudhendra Mishra.
15. Shrimati Sharda Mukerjee.
16. Shri Chhotubhai M. Patel.
17. Shri Naval Prabhakar.
18. Shri R. Ramanathan Chettiar.
19. Shri Sham Lal Saraf.
20. Shri A. T. Sarma.
21. Dr. L. M. Singhvi.
22. Shri K. K. Warior.
23. Shri Balkrishna Wasnik.
24. Shri Ram Sewak Yadav.

Rajya Sabha

25. Shri Arjun Arora.
26. Shri Vimalkumar M. Chordia.
27. Shri D. P. Karmarkar.
28. Shri B. T. Kulkarni.
29. Shri P. K. Kumaran.
30. Shri Shyamnandan Mishra.

31. Shri Dahyabhai V. Patel.
32. Shri Mulka Govinda Reddy.
33. Shri M. R. Shervani.
34. Dr. M. M. S. Siddhu.
35. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

The Chemical, Industrial and Pharmaceutical Laboratories Ltd., Bombay

Dr. K. A. Hamied.

The Chemical Industrial and Pharmaceutical Laboratories Ltd. Bombay

Spokesman:

Dr. K. A. Hamied.

(The witness was called in and he took his seat)

Mr. Chairman: Dr. K. A. Hamied, whatever evidence you give before this Committee will be printed and published. It will be laid on the Table of the House and distributed to members. Even if you want any particular portion of your evidence to be treated as confidential, it is liable to be given to our members.

We have received your memorandum and it has been circulated to all the members. If you want to add anything you may do so now.

Dr. K. A. Hamied: Sir, I am appearing here in my individual capacity.

Mr. Chairman: You are not representing Cipla?

Dr. K. A. Hamied: I am the Chairman of Cipla. I may say a few words about myself because that will reflect upon my evidence. Although it may

be against me, I may say that I am holding so many patents, but I believe that the interests of my country are before everything else. I have been associated with Mahatma Gandhi. I have lived with Gandhi in Sabarmati. I am hundred per cent a member of the Congress Party. I was a member of the Bombay Legislative Council for 25 years. I am now Chairman of the Pharmaceutical Drug Research Committee of the Government of India. I have been a member of the Indian Chemical Association and its President continuously for four years. My connection with the pharmaceutical and chemical industry is for the last 35 years and have done something—I am not bragging—for the uplift of the chemical and pharmaceutical industry of my country to its present level, to what it is today, in the last 35 years. Therefore, what I say before you today should be judged from that point of view.

Coming to the patent law, the first patent was granted in England in 1449 for some glass manufactured by some English inventor. There was

no legislation for patents in England at that time. The first legislation came in 1624 or something like that. Then the patent was granted only as a protection for the process of manufacture of certain items. What happened was, after some time Germany and other countries manufactured the same substance and exported it to England at a cheaper rate. Therefore, the U.K. Government brought in an order that nobody can import or sell a product by the process which has been patented in England. Therefore, this process of product and patent started in England first. Afterwards the need arose when Germany, France, America and other countries which were scientifically developed tried to protect each other against the inventions of one country to be exploited by the other countries. They met and thought about it first at the International Patent Club where it was agreed that the patents of Germany should be protected in England, England should protect the inventions of France and so on. So it became a reciprocal law in which no country had the advantage over the other country—Germany took hundred patents in England, England had hundred patents in Germany, France protected American inventions, America protected the inventions by France and so on. In this way the whole thing started.

In India, the patent system was started in 1911 during the British rule. We have no patents to protect. In the Ayyangar Report there is a mention that 1300 patents of foreign companies exist today in drugs and pharmaceuticals, but the report has not mentioned a word about patents of India in America, Germany or elsewhere. Therefore, so far as India is concerned this patent law is a one-sided traffic, it is only exploitation of our country by these patents held by foreigners. We have no patent anywhere, the reason being that we are not so scientifically advanced, we are not so scientifically developed that we can make inventions and discoveries

and take patents in the highly developed countries. I hope a day will come when we shall take patents.

An example of this was Japan. Japan had no patent law till 1945. It is surprising that the Japanese delegation which came here yesterday or the day before and saw the Finance Minister and others was opposing this Bill. Japan is the first country which developed on account of the absence of patent law. In Japan they copied everything. They became so big at the time of the Second World War that they played hell with America and England. Their submarines, cruisers, guns were exactly like others. Japan brought in the patent law for two reasons. One is, Japan was at that time—in 1945—under the control of America and it was American pressure that made Japan to bring in the patent law. Secondly, Japan's own inventions became so great—transistors, cameras, television apparatus and others—that Japan was herself interested in protecting her inventions in other countries. Therefore, Japan brought the patent law in Japan.

Today the position is that the foreign companies or scientists who take patents in our country are not even utilising those patents. I have submitted here a list of firms. There are about 2000 patents held in India by foreign companies and foreign persons. How many are they exploiting? They are just holding the patents. They are not utilising them. I have made an estimate that not more than 10 or 15 at the most—I have not got the exact figure—are exploited in India. The rest are not exploited in India. They are simply holding it. I will give you an example. A substance was being sold in India by a firm at the rate of Rs. 8 for 20 tablets. They are holding a patent for that substance but they are not manufacturing it. They are importing it. I also imported that substance. My cost of 40 tablets came to Rs. 2. The moment I put them in the market they filed a suit

against me in the High Court saying that I cannot sell them because they were holding the patent for import, sale and distribution. I lost the case I can understand it if they are manufacturing it. But they are not manufacturing it. They are importing it; but I cannot import because they are holding the patent: law should say that if a patent-holder is not making the product for which he holds a patent but imports it and sells it in India, then anybody can import and sell it. The moment he starts manufacturing, I cannot manufacture it, but if he is importing, I can also import it. There is no reason why a person should be granted a patent if he is not manufacturing it.

Some people may say that Italy has no patent law. I will read a quotation from "Manufacturing Chemist" London, Vol. XXX No. 10 (page 406) of October 1959:

"Paradoxically, Italy has the distinction of being the only major manufacturing country in Europe that does not grant patents for medicines or processes, and yet has a flourishing pharmaceutical industry. This absence of patents has enabled Italian manufacturers to make many valuable drugs discovered elsewhere. The costs of research have thus been evaded, and this has played no small part in the growth of the post-war Italian pharmaceutical output. At the same time, an Italian manufacturer enjoys the patent protection of other countries for his own inventions. This one-sided scheme has aroused considerable resentment, but, as it is due to the economic environment, it is unlikely to change until new factors come into play. When the Italian pharmaceutical manufacturers become more interested in originating their own products, the question of protection in the home market will acquire more than academic interest, and some reciprocal patent arrangements may become an economic necessity."

So, here also they are speaking of reciprocal arrangement. Today Italian inventors and discoverers are at a low ebb that they cannot compete with America in discoveries and inventions. So, they do not allow their inventions to be patented so that their industries flourish. Here arguments are being advanced that the Indian pharmaceutical and chemical industry will go down if the revised patent Bill is passed and the foreign manufacturers will go out of India. Nothing of that sort will happen. I can assure you that even if the Patent Bill is passed as it is, they will never go out of India. We are paying them 4 per cent royalty. So, if our sales go up to Rs. 20 lakhs they will get Rs. 80,000 from the patented firms. So, they will not be at a loss and they will certainly not go out of India.

I will now come to another point which is at the back of this agitation. Today the foreign manufacturers like Sandoz, CIBA, Roche and ICI are protected by these patents. If the patent law is abolished, these firms will have to compete between themselves.

Mr. Chairman: It will be for the good of the country.

Dr. K. A. Hamied: Yes, sure. If the patent law is abolished, it may well happen that one European firm is holding a patent for a product in England. Another European firm may also be holding patent in England but not in India.

Shri R. Ramanathan Chettiar: It does not affect our interests.

Dr. K. A. Hamied: Yes, it will be beneficial for our country.

It is also said that patents encourage development and research. It is just the reverse. The chemical industry is so well advanced in Europe and other countries that for manufacturing one product they have got about 10 methods. What happens is that the foreign manufacturers patent,

not only one process but all the ten processes. They do not leave anything to us. They have covered all the processes conceivable in the chemical industry because they are so advanced. So, our scientists or laboratories are not able to adopt any new process. Therefore, I would suggest that if a patent is granted, it should be only for one process which the patentee is using; it should not be for 20 processes. If he is using one process, let him patent only that process. If he wants a patent for the second process, the patent for the first process goes away. This will give an opportunity to Indian scientists and research workers to make use of some processes at least. Today we have not got that opportunity.

I will give an example. There is a machine manufactured in Bombay by a Sindhi called Magamal, a tablet-making machine, exactly identical to the one made by certain foreign manufacturers. When I told him that it is a patented machine, he said that he has changed some screws here and there and so it is entirely a new machine. I told him "all right, you go on with that". Because, if we go on doing that, we shall be able very soon to compete with the foreign manufacturers, as this machine will cost only Rs. 12,000 as against Rs. 20,000 for an imported machine. I was only saying this is how the absence of a patent law will help us.

Shri D. P. Karmarkar: If the patent law is left as it is, will it not mean infringing the patent law?

Dr. K. A. Hamied: He is infringing the patent law. I asked him to go ahead because I do not care for the patent law. Let him file a suit, if he thinks the patent law is infringed.

I think for the development of our country for the next twenty years there should be no patent law. In my opinion, the patent law should be completely abrogated. But, on account of international complications

we may not be able to do that. The proposed Patent Bill is better than the existing Act of 1911. It is a compromise, not hundred per cent what I personally wanted for the sake of my country. The country cannot develop with the present patent law. We are completely under the hold of these patent-holders and we cannot manufacture or discover because they have covered all the processes.

When the patent-holder takes a patent in India, he is not allowed by his parent office in Switzerland or France or any other country to export that product which he makes in India under that patent. He is only exploiting the Indian market. I want it to be made a condition that if you want to patent for a particular product, give us an undertaking that you will export that product.

I had a big talk on this subject with our late Prime Minister, Shri Shastri, who was at that time the Minister of Industry. He told me that all these firms about whom I was speaking were Indian firms registered in India. I said that the criterion I would fix for saying whether it is an Indian firm or not is that if the firm exports the products manufactured in India I will consider it as an Indian firm but if the products manufactured in India are mainly for the exploitation of the Indian market and the firms are prohibited from exporting it, it is not an Indian firm. Shri Shastri immediately took a paper and wrote it down. He said, "It is a strong point that you are telling me".

For example, there are certain firms which are making sulphadiazene in India. I got an order for one tonne of sulphadiazene from Singapore. When I contacted those firms, they asked me what for I wanted it and when I said that I wanted it for export, they said that export was not allowed. They are utilising the patent with a foreign collaboration only in India. I do not call such a firm as an Indian firm. This is one point

which should be kept in mind by Hon. Members here. If I am manufacturing something, and my products are being exported, I am proud of it. Which Indian firm can be called a truly, patriotic Indian firm which does not export or is prohibited from exporting its product?

Then, the very fact that so many experts from foreign countries, lawyers and representatives of foreign firms, are being brought to India to oppose the Patent Bill shows how important it is for the foreign firms that the revision of the Patent Bill should not come in; otherwise, they will not do it. If today you draft a Bill which is beneficial to them, they will not care; they will keep quiet and will not agitate at all. But this Bill is in the interest of India and if this is passed—it is very mild today—I am sure, it will help the development of our industries.

Then, the Reserve Bank of India Bulletin for November 1964 at page 1383 has given figures on the collaboration in the chemical and pharmaceutical industry. In the field of basic industrial chemicals, the paid-up capital is Rs. 7.6 crores, foreign capital is Rs. 2.2 crores and remittances by foreign firms abroad is Rs. 32.45 lakhs per year. In the pharmaceutical industry the capital invested is Rs. 8.74 crores, foreign capital is Rs. 7.58 crores and the remittance of dividends is Rs. 99.68 lakhs. In the other chemicals, the paid-up capital is Rs. 13.97 crores, foreign capital is Rs. 5.07 crores and dividend remittance is Rs. 72.54 lakhs. Then, royalties are Rs. 2.42 crores and technical services remittances are Rs. 2.86 crores. The total remittances by foreign firms on account of royalties, technical know-how and dividends are Rs. 7.36 crores. I cannot get Rs. 5,000 to go outside but the foreigners can remit Rs. 7.36 crores per year only under these headings only.

Shri M. R. Sherwani: I am sorry to interrupt, but when I said that Rs. 2 lakhs per day are being drained out

of the country, it was contested. Here only under one item it is Rs. 7 crores. So, it is not Rs. 2 lakhs per day but it is actually Rs. 5 lakhs.

Dr. K. A. Hamied: Then, 51 firms in India—they are almost all foreign firms with or without Indian collaboration—are producing and selling 1,933 pharmaceutical formulations in India. For these formulations these firms are using imported raw materials. Almost 80 per cent are imported raw materials. For those raw materials they are holding patents in India but they are importing them.

Mr. Chairman: They are not manufacturing it?

Dr. K. A. Hamied: They are holding the patents but are importing them. For example, in a tablet there are three ingredients and for all the three ingredients the firm is holding a patent but it is not manufacturing these three ingredients and is importing to the tune of Rs. 20 lakhs a year. Then, why are they holding the patent?

In my second letter dated the 8th January to the hon. Members I have said, "Will you kindly put these questions to the foreigners as to how many patents they are holding, what are the names of the products for which they are holding patents and how many patents they are utilising in India and then just see their replies". If they are holding 100 patents they are using only one; if they are holding 200 patents, they are utilising only one or two. Why are they anxious when they are not utilising their patents in India? It is for the sake of import and product control so that nobody else can produce. The amount of foreign exchange going on this account is terrible.

Shri D. P. Karmarkar: In case your point of view that there should be no patent law for 20 years is not accepted, you have been good enough to make some specific suggestions on page 8 of your note. They are four.

You say, firstly, that only one process for the product by which they are manufacturing shall be patented. In the second paragraph you say that compulsory licensing shall be enforced even if the patentee is manufacturing the product himself. Are you satisfied with the provision that is already there with regard to compulsory licensing where in the case of drugs and medicines, even in the case of a patent, there should be compulsory licence under those conditions?

Dr. K. A. Hamied: There should be compulsory licensing. Licence of right is also very necessary.

Shri D. P. Karmarkar: Take cl. 87. It says patents covering medicines, drugs etc. shall be deemed to be endorsed with the words 'Licences of Right'. Does that satisfy you?

Dr. K. A. Hamied: It is very necessary under existing conditions.

Shri D. P. Karmarkar: Regarding your para 3, your point is that some measure should be devised.

Dr. K. A. Hamied: What about paragraph 1? Suppose a patentee has got 100 processes patented.

Shri D. P. Karmarkar: If a particular patentee does use a particular process in so far as medicine and drugs are concerned, the other processes could be straightway be thrown open according to the provisions of 87. There is no difficulty about that. Suppose you have patented 100 processes and you are utilising only one process. So far as drugs and medicines and food and chemical substances are concerned, if you do not utilise the other processes, straightway compulsory licences can be obtained by others.

Shri K. V. Venkatachalam: Even if he utilises, it can be done.

Dr. K. A. Hamied: I am saying that patent should be granted only for one process.

Shri D. P. Karmarkar: What is the difference? Suppose a man has made

a discovery, no matter whether Indian or foreign. I make a discovery today in India. I have it patented immediately. Suppose a foreigner comes in. He immediately gets about 100 patents registered with the Patent Controller. Now if it is a drug or medicine, on the registration of the patent itself, you can have a compulsory licence. So what is your objection to his obtaining the 100 patents?

Dr. K. A. Hamied: I am not objecting. I am objecting to his patenting 100 processes or one product. There is a lot of difference.

Shri D. P. Karmarkar: He has patented 100 processes for one thing. He is using only one process. For the 99 processes, you should have the freedom. Is that so?

Dr. K. A. Hamied: Not only freedom. I say that the 99 process should not be patented in his favour. Only one patent should be given.

He is using only one. The rest he keeps in his shelf. With the result, that I cannot use any of those processes; I cannot have any of those processes patented if I discover any of them.

Mr. Chairman: Yesterday Dr. Parikh said that so many combinations are possible and he pointed out that the patent is made to cover all those combinations. What Dr. Hamied wants is: give him a process patent for only one product through one process.

Shri D. P. Karmarkar: What is his difficulty if the person gets a hundred processes patented, differently or may be in one combined lot, if he utilises only one process, because this clause then comes in?

Mr. Chairman: What witness say is: do not give him one process and allow him to cover 100 processes for one product.

Shri D. P. Karmarkar: What is his difficulty. If out of 100 processes, the

patentee utilises only one process and then keeps all the 99 to be exploited by others through compulsory licensing, what is the objection?

Dr. K. A. Hamied: No. Chemical science is a very advanced science. To reach a certain product, I can go by many ways. These foreign firms are of highly scientifically advanced nations possessing these process patents. After getting these processes patented, their scientists start work to find out if there is any other method by which the same thing can be made. They have highly qualified scientists at their disposal. They find out: yes, there are 5 or 6 processes more by which the same thing can be made. They immediately include these in their patents.

Take tolbutamide patent held by Hoechst. There are about 17 processes patented by Hoechst for one product, tolbutamide. We cannot reach tolbutamide by any other route,

Shri K. V. Venkttachalam: Cl. 87(1) will permit you to do so.

Dr. K. A. Hamied: My point is: why should he be given all the processes when he is using only one?

Shri D. P. Karmarkar: We shall have to find out some foolproof method in regard to what this witness has said and what the other witnesses yesterday afternoon said, because it is rather important.

Shri M. R. Shervani: The point made is that when all the 17 processes have been patented by that party, all the routes get closed to our scientists and research is closed.

Shri D. P. Karmarkar: I appreciate your point. According to your para 3, you want to devise some measure to stop exploitation by way of unreasonably high prices after the patentee begins to work. We have to find out some statutory measure empowering Government to put a stop to that.

Dr. K. A. Hamied: I am sorry. No statutory measure can control prices.

Government has tried it in regard to food, cement and so many other things. Prices can only be controlled by competition. If five people make the same thing, no man will charge high price. If a particular firm is holding a patent and it only is manufacturing that product, it can sell it at its price. The moment I also come into the field, either by licensing or by licence of right or compulsory licensing or by my own skill, it will immediately reduce it. I can give examples. A firm in Bombay was selling a particular injection at Rs. 25 for two. I started manufacturing the same thing. They sent me a notice alleging infringement of patent. I said, I do not care. You fight it out; we shall see. I sold it for Rs. 4.5. Then they reduced it from Rs. 25 to Rs. 14 and now to Rs. 9. The moment competition starts, prices come down.

Another Indian firm, not holding a patent but collaborating with a foreign firm, was manufacturing a product and selling it at Rs. 63. When I got a licence to make the same product, I made it and sold it at Rs. 45. Immediately they brought down their price.

Today these firms are holding not only a patent monopoly but also import monopoly.

Shri D. P. Karmarkar: Under cl. 87, anyone can have a licence of right granted to him under acceptable conditions. That removes your difficulty with regard to competition.

Even in spite of that right, there may not be Indian parties coming up. In that case also, your point is that even if there is one monopolist manufacturer and no other Indian is prepared to come up, you would like that the price he charges for his product in India should not be unconscionably high. For that, if possible, legal provisions should be made in the Bill giving power to Government.

Dr. K. A. Hamied: That can be brought into this Bill, but this is not a Price Control Bill.

Shri D. P. Karmarkar: Witness is not a lawyer. We shall find out how it can be done. The draftsmen know that in some of the clauses reference has been made to public interest. Whether under this, price control can be covered, we shall later decide.

Finally, what is the exact significance of paragraph 4?

Dr. K. A. Hamied: I had explained that. Supposing a patent is granted to a firm in India for the manufacture of cortisone....

Shri D. P. Karmarkar: I understand the process. Supposing it is found on a balance of advantage that even if the party is not prepared to export in the interest of manufacture in India itself, even when that export promotion is of advantage to us, even then you ask us not to allow it?

Dr. K. A. Hamied: In that case it must be allowed.

Shri Jadhav: These foreign firms do exploit. At the same time, do you agree that it did help in bringing in new drugs in the market for the development of the industry.

Dr. K. A. Hamied: I may explain the difference between the word drug and the word chemical industry, which is not clear to many. It is like that of a shirt and a cloth. Shirt is made of cloth; so long as it is cloth you do not call it a shirt. Ascorbic acid is just a chemical; so long as it is in bulk it is not called vitamin C. The moment it is manufactured into tablets and ready for sale it ceases to be a chemical; it is a drug. The drug industry in India during the last eighteen years has gone up considerably manufacturing tablets, formulations, lotions, etc. But we have not developed the basic industry from which drugs are manufactured. If the import of foreign materials, basic pharmaceuticals are stopped the industry will fall flat. In this connection, I may be allowed to read a quotation from the speech of the late Pandit Nehru which I quoted in one of my

speeches. He said that operating a steel mill or a chemical plant set up by foreign assistance would hardly make the country advanced an industrial nation no more than using a car or flying an aeroplane purchased from abroad. It is only when India has acquired the ability to design, to fabricate and to work its own plants without foreign assistance will it be a truly advanced and industrialised country." I am say that I entirely agree with this point. We are so much dependent on the foreign technical know-how and foreign money and foreign help that we are ceasing to be a nation on our own. I do not want to boast but I can say that without any foreign help or technical know-how I am able to supply drugs and am even exporting to England and other foreign countries. We can do it provided we work for it increasingly.

Shri M. R. Shervani: You say that no development has taken place in the chemical industry. Is it due to a defective patent law?

Dr. K. A. Hamied: I say that the development that has taken place in the drug industry is not due to any basic development in the chemical industry. I drew that distinction. This patent law, I think, will help us in starting some basic manufacture if we are not hindered by the patents held by foreigners in India.

Shri M. R. Shervani: The point is that anybody who obtains or patents a certain product here should be forced to manufacture it in India within a reasonable period. Otherwise the patent should not be granted. If you do not do so, they keep on importing. Therefore, it should be obligatory on him to start manufacture in the country. What, in your opinion, is a reasonable period to be given to the patentee to start production of the product? Two, or three or five years?

Dr. K. A. Hamied: Supposing you fix a time and if he does not manufacture within that time, what penalty should be imposed on him?

Shri M. R. Shervani: Cancellation of the patent. Everybody should be free to start the production.

Dr. K. A. Hamied: If he does not manufacture within two or three years, anybody can step in.

Shri K. V. Venkatachalam: There is provision for revocation also.

Shri M. R. Shervani: That is a different thing. If I hold a patent and I do not exploit it but sit tight on it, how long should I be allowed to sit tight because I do not want to take a risk and invest money. Should there not be a clause that the patent will be cancelled if the patentee does not within three or five or ten years or one year—whatever be the period—exploit that patent by starting a manufacturing organisation? If that is so what time should be put for the chemical or drug industry? Three years from the time of granting?

Dr. K. A. Hamied: At present there is no clause like that.

Shri K. V. Venkatachalam: There is clause 89(1).

Shri M. R. Shervani: It is two years. Why not put an automatic provision that it should be considered after three years?

Dr. K. A. Hamied: Somebody must apply.

Shri K. V. Venkatachalam: Everything has to come within the process of law.

Dr. K. A. Hamied: With regard to these patents, it should not be a cognizable offence. Somebody has to write, saying, "so and so is holding patents for the last six or 10 years, and he is not using it. I am having a compulsory licence but I cannot proceed."

Shri M. R. Shervani: My next question is this. You said that if patented drugs are being imported, then their free import should be allowed, subject to the restrictions placed through import control, foreign exchange and so on.

Dr. K. A. Hamied: Yes; that is very important. If a gentleman or a firm is holding a patent, and is selling a kind of tablet or injection in which that material is being used, and he is not manufacturing that material in India, and he is importing it, by virtue of the patent, he is stopping me from importing it. So, he has the monopoly for importing it and selling it at any price he likes. That is a very important aspect.

Shri M. R. Shervani: Let us consider the interests of the Indian patentees; let alone the foreigners. There is a provision in the law which says that the Government, even for public undertakings in the State or the Central sphere, can utilise the patent without paying any compensation to anybody.

Shri K. V. Venkatachalam: I think there is a little confusion in this. There are really two clauses in the Bill; one refers to use by Government for non-commercial purposes, for its own use like giving it for hospitals and so on. There, no compensation or royalty is payable. This is in clause 48. Then there is another clause—clause 99 and 100 onwards—which refers to use of patent by Government and Government undertakings which are of a commercial nature. There, compensation has to be paid. If it is a public undertaking, it is not limited only to Government undertakings. For example, in the steel industry, it can apply to both the private sector undertakings and the public sector undertakings in that group. This provision is contained in sections 99 and other following sections.

Shri M. R. Shervani: What in your opinion should be the life of a patent? Should it be 10 years or should it be reduced or increased, particularly in regard to drugs and chemicals, and from when should the life start and from which stage?

Dr. K. A. Hamied: It so happens in India that an application is made for

the grant of a patent, but along with the application, the full specifications are not submitted by the applicant, and the applicant is given about one year to 15 months for submitting the complete specifications of the patent. Now, the period is 10 years, but it really becomes 11 years and three months, because one year is also given for submitting the specifications. So, the time given to him is not exactly 10 years but it is 11 years and more.

Shri K. V. Venkatachalam: In the new Bill, it is suggested that the period should be from the date when the complete specifications are filed before the Controller.

Dr. K. A. Hamied: From the date of application, it becomes 11 years. As soon as the application and the specifications are filed, the party concerned starts manufacture and he writes, "patent applied for" and so, nobody can copy that process. He has actually 11 years to exploit that patent, not from the time of selling the patent but from the time he submits or files his specification, and he can exploit it and nobody can copy it. He has just to mention "patent applied for." Even in respect of a machinery, they can do so.

Shri Atrishi: We cannot have a suit brought against him before the sealing of the patent because the rights accrue to the patentee only after the sealing of the patent.

Dr. K. A. Hamied: No. It cannot be copied. That is the rule in the present Act.

Shri M. R. Shervani: In the sphere of drugs and medicines, tests have to be gone through and the bad effects are observed and discovered. So, it is quite possible that 10 years may not be sufficient; eight years may go by before it is put into use, into commercial production. So, would you like to give power to the Government to extend the time in suitable cases?

Dr. K. A. Hamied: I think the Controller can give it as a concession to the patent-holder; if the patent-holder wants, under certain specific circumstances, saying that such and such a thing is not available and he could not utilise the patent and so the time must be extended by another two years, then, I think it should be allowed.

Shri D. P. Karmarkar: You said that 10 years would amount to 11 years. According to clause 45, you will see that every patent shall be dated as of the date on which the complete specification was filed—not when the original application was filed—but from the date on which the complete specification was filed. So, it would not be 11 or 15 years as the case may be. The effective date is from the date of the completion of the specification.

Dr. K. A. Hamied: Yes.

Shri P. K. Kumaran: You said that you are for the abrogation of the patent law for drugs, if possible. But in the absence of that, you prefer this process. Suppose, the patent law is abrogated completely, don't you think that the market will be flooded with so many drugs and in order to promote their sale in the market, the quality of the drugs would become inferior?

Dr. K. A. Hamied: The hon. Member is confusing the term "drug" with the term "chemical". For preserving the quality of the drugs, there is the Drug Control Order; nobody can make a sub-standard drug in India so long as the Drug Control Order is effective. But for chemicals, there is no such difficulty, because, the manufacturers who buy those chemicals are themselves so careful that they analyse the chemical before they buy it. I analyse all the chemicals from Europe and America before I put it in the market. It is about the medicines that you are talking; they are controlled by the Drug Controller. Nobody can buy and

sell them. There is no patent for the drugs today in India; there is a patent for chemical processes. The hon. Member is confusing the terms with the proprietary registered names of foreign manufacturers such as Paludrine, Tolbutamide, and so on. We are unable to make them, because those names are registered trade marks and there is no law to prohibit them. The quality of the chemicals and pharmaceuticals and basic chemicals, manufactured in India will be such that everyone will compete and those who are selling better quality stuff will naturally have some lead. But today there is no such competition.

Shri P. K. Kumaran: I can advertise that such and such a popular drug of the same quality as that brought from elsewhere is available and then manufacture anything.

Dr. K. A. Hamied: The hon. Member is again confusing the two. We are now talking about chemicals. You give me the name of the drug.

Shri P. K. Kumaran: I am making a certain thing which I call by some name and it is having the same quality as the popular drug. I can manufacture it according to my own process and market it. It may affect the health of the people.

Dr. K. A. Hamied: But you cannot market it. There is the law.

Shri Arjun Arora: We have been told by some people that the abrogation or the modification of the patent law in India will create a situation under which no Indian will be able to get the patents abroad. How will it affect Indians?

Dr. K. A. Hamied: We have to examine first how many patents Indian inventors and scientists are taking outside India. In America, during the last 20 years, the number may not be more than 3 or 4 or 5 whereas during 1955 to 1959, 2000 patents have been taken in India by foreigners.

Shri Arjun Arora: Do you have any idea of the earnings that Indians make

because of patents that they are able to get abroad?

Dr. K. A. Hamied: At the moment it is nil so far as I know.

Shri Arjun Arora: Do you envisage that in the next 10 years, the Indians will be doing a roaring business because of their patents abroad?

Dr. K. A. Hamied: At least I am living on that hope.

Shri Arjun Arora: What is your practical experience?

Dr. K. A. Hamied: The rate at which Indian science is advancing today through the C.S.I.R. and other private enterprises where scientific laboratories are working, we are capable of progressing at a very high speed unless they are not frustrated in their attempts by these hindrances in their ways. You may just see the example of Japan. Today, the Japanese transistors, radios, cameras and photographic apparatus are flooding the world. How did they learn all this? It is by copying anything which others are making.

Shri Arjun Arora: If we do not have the patent law, like the present one—infact, the proposed Bill—the result will be that Indians will not be able to get the know-how from abroad. What is your opinion on this.

Dr. K. A. Hamied: I shall be glad if we do not get the know-how. Then, our know-how will start working. Today, it is lying dormant. The things are being manufactured in India with foreign collaboration which an ordinary M.Sc. in India can make. I was a member of the Finance Corporation and I objected to many licences being granted in collaboration with foreigners. I said, "Why are you giving Rs. 10 lakhs royalty to such and such an American firm? Why don't you come to me? I will give you full advice." But they do not come to me. The foreign technical know-how has got such a halo about it that we are completely, ignoring our own knowledge. We are not advancing because

we are getting something free. We want to become rich quicker. If I combine with, say, I.C.I., I shall be able to earn Rs. 1 lakh by next year. If I do it myself, it will take 4 years to earn Rs. 1 lakh. So, I say, why not I combine with I.C.I.?

Shri Arjun Arora: If India is starved of foreign know-how in the field of chemicals and drugs, may I know whether there will be a famine of medicines in India?

Dr. K. A. Hamied: Never.

Shri Arjun Arora: We shall be able to meet our requirements?

Dr. K. A. Hamied: We shall be able to meet our requirements. Even today, we are not able to meet our requirements. 80 per cent of the drugs are dependent on the import of foreign raw materials, not on the import of technical know-how.

Shri Arjun Arora: A number of foreigners take patents in India and they do not start the process of manufacture in this country. Do you have any idea as to what is their percentage? Are they in a minority or in a majority?

Mr. Chairman: He has given the answer.

Dr. K. A. Hamied: I have given the answer.

Shri Daljit Singh: You say in your Memorandum that the compulsory licensing of the patent should be enforced even if the patentee is manufacturing the product himself. Now, the existing Act covers this.

Dr. K. A. Hamied: I think it does. When I wrote that Memorandum, the Act was not printed.

Shri Daljit Singh: You have stated in your Memorandum that Japan did not have the patent law before the Second World War. Is it not a fact that in Japan the patent law was first introduced approximately in 1921?

Dr. K. A. Hamied: Not to my knowledge. I think Mr. Davar who

appeared before this Committee confirmed that it was in 1945 that the patent law was introduced in Japan. That is my information also.

Shri Daljit Singh: You have stated that the patent law is one-way traffic so far as India is concerned because the number of patent taken by the foreigners in India is very large. We want to know how this problem can be tackled by India.

Dr. K. A. Hamied: The taking of patents is not according to my wish or according to the wish of our country. It depends on the advancement of scientific knowledge, inventive genius and all that. As our country develops, our inventive genius advances, we shall be able to develop things and make inventions and take patents in other countries. But today that is not the case. Let us have that gap of 20 years in which we can develop ourselves.

Shri Wasnik: You have stated that free competition will check the high prices and not the Government control. What I feel is that the combination of interested parties can dictate the prices and cause hardship to the consumer. In such cases, what do you think the Government should do? Should they make any provision here?

Dr. K. A. Hamied: The Government can make a provision, as in the United States, against forming cartels. In the United States, the big firms like the Dupont, Monsanto, were not allowed to make unions. They were prosecuted immediately and big penalties were imposed on them. So, here also that provision can be made by the Government that no cartels or unions can be made.

Shri Wasnik: What do you think should be the term of patents?

Dr. K. A. Hamied: I think, what is proposed now is all right. I would have chosen a less period. But now that the Bill has come and the period is given there, it is all right.

Shri Wasnik: We can change it.

Dr. K. A. Hamied: Between 7 to 8 years would have been all right.

Shri Arjun Arora: Seven years from the date of certification or application?

Dr. K. A. Hamied: From the date of certification.

Dr. M. M. S. Siddhu: You gave us the example of Testosterone propionate: a foreign firm came in competition and they slashed the price to 50 per cent of its original price. Have there been other cases like that?

Dr. K. A. Hamied: Yes.

Dr. M. M. S. Siddhu: Can you give other examples where a foreign firm and an Indian firm processed their products and the foreign concern brought the price down so that the Indians may not have a market.

Dr. K. A. Hamied: There are cases when the foreign firms were forced to reduce the prices. But the foreign firms are selling their products on the basis of prestige—false or correct. If it is a small firm, then the foreign firm does not do it. If, however, a firm of equal standing makes a product cheaper, then the foreign firm comes into the field; the foreign firms are afraid of competition with firms of equal standing. If a small firm reduces the price, they may not take care of it.

Dr. M. M. S. Siddhu: What is the time delay in the grant of licence for the manufacture? Because it has been pointed out that, once a patent is to be exploited, there are some delays: one is the delay at the patent office; the second is the delay at the licence; and the third is the foreign exchange component. You have been in this chemical industry for a long time. Could you tell us by your experience as to what is the usual time taken for an industry to be set up for a new drug?

Dr. K. A. Hamied: Including the application?

Dr. M. M. S. Siddhu: No; if the patentee himself were to exploit it.

Dr. K. A. Hamied: That means, the patent has been granted to him. Then the process is licensing by the Development Wing. That may take a long time.

Dr. M. M. S. Siddhu: What is the usual time taken?

Dr. K. A. Hamied: It is too much. I know that a very important foreign firm applied for an industrial licence two years ago and only some months ago they have been issued the letters of intent; they are just starting it. It all depends on the influence and pull of the person.

Dr. M. M. S. Siddhu: If that is so, do you think that 7 years' time is enough—I mean, under the present conditions of the country?

Dr. K. A. Hamied: So far as the time taken for the Development Wing to issue a licence to the manufacturer is concerned, that is a different problem, which I cannot answer just now.

Dr. M. M. S. Siddhu: What is the usual time taken in the screening of the compound, toxicity and other clinical tests being done?

Dr. K. A. Hamied: One year or two years or six months; it depends on the nature of the substance.

Dr. M. M. S. Siddhu: Assuming that good scientific talent is available, what is the usual time taken?

Dr. K. A. Hamied: It depends on the product to be tested. Suppose there is a birth control product, it may take five years. Suppose it is a product for heart disease, it may take a long time. In the case of certain products like the product for diabetes, I can give the report within one month.

Dr. M. M. S. Siddhu: You know the recent advances that have been made in the field of antibiotics, in the field of anti-diabetics, in the field of tranquilisers—I am not talking of hormones which take a long time. What is the usual time taken in these fields?

Dr. K. A. Hamied: About a year or 18 months; in the case of diabetes, it may even be less.

Dr. M. M. S. Siddhu: If we were to think in terms of not having the foreign subsidiaries, can we get all the intermediates from which we will be able to have the product manufactured if the compulsory licence is granted or they will hold back the intermediates?

Dr. K. A. Hamied: It will take a long time to reply to this question.

Dr. M. M. S. Siddhu: Suppose we give a compulsory licence to 'A' and the intermediates are controlled by the patentee. If the patentee does not want to co-operate, can we exploit it?

Dr. K. A. Hamied: About two months ago, a Conference was held in Delhi by the Council of Scientific & Industrial Research on the substitution of imported products in India. I was the Chairman of the Group of pharmaceutical chemicals. This question was discussed threadbare there. The point is that the chemical industry on which all the synthetic products are based starts from a very basic raw material called coal tar distillates like toluene, benzene and phenol. These coal tar products are developed by other subsidiary chemicals like sulphuric acid, nitric acid, etc., and are converted into intermediates. These intermediates are made as synthetic chemicals which are used in drug industry, plastic industry, etc. These intermediates are a go-between between coal tar and the final product. In India, there is a great scarcity of coal tar. We have got coke oven plants, under government control as well as under Tatas, but the coal tar which comes out is not further distilled. We are having a big scarcity of basic coal tar distillates and so we cannot manufacture the intermediates. Because we cannot manufacture the intermediates, we cannot manufacture final products. It is a chain reaction. At what stage shall we start? If we start manufacture of

final products, we must have intermediates; if we start manufacture of intermediates, we must have coal tar.

I am attending another Conference on the 7th of this month on the very same subject. From which point we shall start? I have suggested that we should start from the basic coal tar. The coal tar is wasted on roads; why is it not distilled?

Dr. M. M. S. Siddhu: In other words, till the petro-chemical complex and the coal tar derivative complex which are the base of the pharmaceutical industry, are developed, we will be at the mercy of the foreign concerns.

Dr. K. A. Hamied: About petrochemicals also, they are not made here. They are made from petroleum. Petroleum is from crude oil. Where is crude oil in India? It is also being imported. Bulk of the crude oil is being imported for the distilleries in Madras, Bombay and Calcutta. So for petrochemicals also we are going to import this crude oil; we shall break it up into petroleum and chemicals. We are copying America! In America, this petroleum is natural and it is being utilised for these chemicals. Crude oil is available in Mexico and other places. We are copying that method without having the crude oil. Import licence will increase enormously. We should have some basic thing. Imports of crude oil will still remain.

Dr. M. M. S. Siddhu: What is the expenditure of the Indian firms, purely Indian firms, with Indian capital, know-how etc.—there are three or four of them, as compared to the foreign concerns on sales promotion? Advertising, detailing representative, sampling, all that is concerned with the sales promotion.

Dr. K. A. Hamied: It is almost equal. Foreign and Indian company is equally divided. Not less than 15 per cent and not more than 25 per cent.

Dr. M. M. S. Siddhu: There is great deal of formulations. Manufacture of

mostly formulations has impaired the growth of the pharmaceutical industry because formulations bring easy money with less capital or know-how with the result that Indian pharmaceutical industry has not begun working on the manufacturing side actually.

Dr. K. A. Hamied: May I deal with the working of the pharmaceutical industry? It is just like the tailoring industry. Materials for the tailoring industry are made by the textile firms. Materials for the pharmaceutical industry are made by the chemical firms. You cannot ask a tailor, why you are not making your own cloth. The tailor is not supposed to make his own cloth. Pharmaceutical manufacturer makes tablets, lotions, injections, ointment and all sorts of things—he is not supposed to manufacture those chemicals. Pharmaceutical industry is basically an industry for the manufacture of ready-to-use drugs and ready-to-use medicines. Pharmaceutical manufacturers in India are manufacturing products which cover a ready market. Today if I can get a formulation for T.B. or influenza and it is useful I will make a formulation for it and sell it. It is not for me to manufacture all the things. Glucose is a thing which is a chemical manufactured by not more than 5 or 10 firms in the whole world. Everybody cannot make. But they are making glucose injections.

Dr. M. M. S. Siddhu: Some of the compounds are of less use. There is a compound for cancer. The sale will be very limited. Do you want for them the same terms of royalty of 4 per cent?

Dr. K. A. Hamied: I am making it without any foreign know-how. We are so bent upon foreign know-how that we forget our own know-how. It is very important. We are getting confidence. I am proud that I am sending the same to foreign firms in India also. I am making a particular hormone drug without any technical

know-how. There is no 4 per cent royalty to anybody.

Mr. Chairman: We have got one more witness.

Shri R. P. Sinha: The compulsory licensing system is on our patent law for quite some time now. There have been lot of patents being registered in this country. Why is it that we are not able to take advantage of those things and start manufacturing the chemicals and drugs here under the sections of the compulsory licensing?

Dr. K. A. Hamied: It has been so, but it is correct. The compulsory licensing now is being made very easy under the existing law. Formerly there was some difficulty in getting compulsory licence. Under this new Act I think compulsory licensing will be taken advantage by us, Indian manufacturers. Besides that, another point also we should remember. In the course of these various years the technical know-how of us, Indians, has also grown. At the moment I can assure you that our own technical know-how is so much that we shall start taking advantage of the compulsory licensing. 10 or 15 years ago chemical science was not so much advanced as it is today. For that same reason, the advantages of the compulsory licensing which were there were not made use of.

Shri R. P. Sinha: As per the compulsory licensing section in this bill more industries under this section can be put up.

Dr. K. A. Hamied: Yes. Our own scientific knowledge has advanced so much. Licence which was granted to me also requires some knowledge on my part. Otherwise I cannot make use of that licence. Licensing of a patent process merely will not help one to put up that industry. During the last 18 years or so our own scientific knowledge has gone forward that we can make use of that licence. 10 or 29 years ago we could not make use of that.

Shri R. P. Sinha: If you use these sections for compulsory licensing that means when you use your own technology and know-how you will develop your own processes and know-how. Will you not like that what you develop should receive adequate protection under patent law so that you can flourish?

Dr. K. A. Hamied: The licence which I will acquire by paying 4 per cent royalty I shall be able to utilise that licence and if there is any flaw in that licence or process given to me I can make it up and I can find out where the flaw lies, by my own efforts. All the patents disclosed to patent office are not complete. 50 per cent of them is not complete. Even if we take the licence we cannot work under them. We have to apply our own knowledge to it. They do not disclose anything in the patent.

Shri R. P. Sinha: You don't get the co-operation of the foreign patent-holder and in spite of that you try to develop your own know-how and your own technical knowledge. Now when you develop that, will you like that to be protected under the patent law or not? That is in respect of your own chemical process, your own technical know-how etc. Or, will you like anybody can make use of that once you have developed it?

Dr. K. A. Hamied: If there is patent law I will take advantage of the patent law. If there is no patent law there is no patent law. But of course we shall take advantage when the patent law is existing.

Shri R. P. Sinha: Will you be able to develop your own industry with the help of your own technical know-how and technical knowledge, if there is no patent law?

Dr. K. A. Hamied: We shall develop. We can develop so many new things even for export to the entire world.

Shri R. P. Sinha: I can also start it and put you into difficulty.

Dr. K. A. Hamied: So much the better for the consumer. You and I may have some difficulties. But the prices will go down.

Shri R. P. Sinha: We find—this is not only with respect to pharmaceutical industries, but other industries as well—that the cost of production in India is higher than in other countries. If we permit importation of those articles produced by these industries, then these industries put up at a heavy national cost in India will be hit. How do you solve this problem?

Dr. K. A. Hamied: It is a very important question. First of all, I do not agree that the cost of production in India today is as high as is reflected by the price charged by the manufactures. I am talking of chemicals and basic materials. I am manufacturing some of them. My price say comes to Rs. 30 which is some what higher than the world price. It is being sold in India at Rs. 100-. Why it should not sold it at Rs. 40/- instead of at Rs. 100? Because I am the only manufacturer.

Shri R. P. Sinha: If there is room only for one industry, we have to control the price by some other mechanism.

Dr. K. A. Hamied: Most of the foreign concerns have taken a licence from the Industry Department on this excuse that there is Room for one manufacture e.g. by Vitamin B12 is manufactured by 20 firms in the world. I am not going to manufacture if there is no Prospect of sale. In India licence has been given only to one firm. The import has been stopped. Please give the licence only to us. And they have been given the licence. They are allowed to sell it at Rs. 220/- a gram whereas the world price is Rs. 30 a gram.

Shri A. T. Sarma: You have stated in your memorandum that the patent law was established in 1911 by British rulers to encourage the British firms

In India. Do you think that the patent protection is harmful to the Indian inventor?

Dr. K. A. Hamied: From 1911 up till now we have not been able to invent anything.

Shri A. T. Sarma: I want you to give concrete instances as to how this has been harmful?

Dr. K. A. Hamied: There is no Indian invention.

Shri A. T. Sarma: Do you mean to say that lack of Indian invention is due to the patent protection?

Dr. K. A. Hamied: When I say 'no invention', it may not be hundred per cent so. There may be one or two inventions.

Shri A. T. Sarma: Was it due to this patent law?

Dr. K. A. Hamied: It was mainly because we were not given opportunities for research and there were no research facilities and there was no research apparatus.

Shri A. T. Sarma: If it was to encourage British firms, how is it that all foreign firms are opposing this and all Indian firms are welcoming it?

Dr. K. A. Hamied: No. We are favouring this change in the patent law.

Shri A. T. Sarma: According to your calculation, it is harmful to the Indian inventors and more beneficial to foreigners.

Dr. K. A. Hamied: That is the old law, not the present Bill.

Shri A. T. Sarma: Then do you welcome this?

Dr. K. A. Hamied: I am in favour of complete abrogation. Since that is not possible due to political and other reasons, I am supporting this Bill subject to certain modifications.

Shri A. T. Sarma: Do you think that the proposed Bill will be beneficial to the Indian inventors?

Dr. K. A. Hamied: I hope so.

Mr. Chairman: I am raising now a very important point. Big foreign firms established in chemical and pharmaceutical industry in India are remitting over Rs. 5 crores of dividends and royalties to foreign countries. Why do not they take up motor car industry? Why do not they take up textile industry in India? Why are they not doing locomotive industry? Why only pharmaceutical industry? That is the question. Why are they not coming into any other industry in a big way?

Shri Bade: As far as abrogation is concerned, of course, we are also of your view that there should be abolition so that the foreigners may not exploit us.

Dr. K. A. Hamied: I am very happy.

Shri Bade: At the same time, you have stated that since we are internationally connected we should not abrogate it. Supposing we make it compulsory that they should disclose their know-how before getting the licence, then they may withdraw from India. I would like to know how many years we require to develop all these drugs.

Dr. K. A. Hamied: I cannot say how many years we will take. And it will be very difficult also to judge how many years we will take to develop all these drugs. But, I hope the process of development will be much faster than it has been hitherto. There will be no hindrances in our way.

Shri Bade: Kindly refer to Section 95—page 55—of the proposed Bill. Sub-clause (3) says:

Notwithstanding anything contained in sub-section (2) the Central Government may, if in its opinion it is necessary so to do in the public interest, direct the Con-

troller at any time to authorise any licensee in respect of a patent to import the patented article or an article or substance made by a patented process from abroad (subject to such conditions as it considers necessary to impose relating among other matters to the quantum of import, the sale price of the imported article, and the period of importation), and thereupon the Controller shall give effect to the directions.

Are you happy with this provision?

Dr. K. A. Hamied: 'To authorise any licensee to import'.

Shri Bade: The whole Bill is nullified by this clause.

Dr. K. A. Hamied: If the original patent holder is not manufacturing the product in the country and if he is allowed to import, then other people also should be allowed to import.

Shri Bade: It is stated in the clause "if in its opinion it is necessary so to do in the public interest, direct the Controller at any time to authorise any licensee in respect of a patent to import the patented article"

Dr. K. A. Hamied: This will kill the whole Patent Bill.

Shri Bade: So you agree with me.

Dr. K. A. Hamied: This is very cleverly put here. The patent holder may appoint as licensee his own firm in India, who is a licensee by right.

Shri K. V. Venkatachalam: It is intended to be there.

Dr. K. A. Hamied: But it is not mentioned. The licensee is sitting in Switzerland. The licensee may be a person belonging to the same firm.

Shri D. P. Karmarkar: He is only a primary licensee.

Dr. K. A. Hamied: Though he is not manufacturing, you allow him to import.

Shri Bade: Supposing there are 3, or 4 processes. Anybody can go to the Court and say that the patentee is using only one process and he is not using three processes. Therefore, there should be compulsory licences for three processes and he will be given compulsory licence.

Dr. K. A. Hamied: He can be given for the first process only.

Shri Bade: That is not the condition here. He can be given compulsory licence for any of the processes.

Dr. K. A. Hamied: They should not be granted patent for any of the processes which they do not use.

Shri Bade: In the proposed Bill, the definition of medicine or drug is all medicines for internal or external use of human beings or animals. In the Drug Act, cosmetics is included in the external use of human beings or animals. I was in that Select Committee also and I objected to that.

Shri D. P. Karmarkar: I thought that was for those intended for curative purposes and not for adornment purposes.

Shri Bade: The definition of drugs given in the Drugs Act is repeated here also.

Shri Bibhudhendra Mishra: I am told by the Drugs Controller that the cosmetics has been separately defined in the Drugs Act.

Mr. Chairman: Anyway, we are not concerned with that here.

Shri Bade: Again, in the definition, Government undertaking means any industrial undertaking. When it is mentioned Government's use, it will mean Corporations also.

Dr. K. A. Hamied: It is only for Government's use, not for trading

purposes by the State Trading Corporation or the IDPL or the Hindustan Antibiotics.

Mr. Chairman: You have already made it sufficiently clear.

Shri P. C. Borooah: Do you agree that with the coming into force of this Act, the terms of existing patents for licence should also come to an end?

Dr. K. A. Hamied: The Bill should have retrospective effect. Licence means patents. The patents will fall in line with the new Bill when it comes into force.

Shri P. C. Borooah: Now India is holding a position because it stands on certain commitments. If we curtail the terms, then we will be falling back on our commitments.

Dr. K. A. Hamied: In those commitments India has never guaranteed that there will be no alteration or changes in the Patent Bill. There is no clause like that.

Shri R. Ramanathan Chettiar: From your experience, are cartels in the drug and pharmaceutical industry operating in India under the guise of the firms enumerated in your list?

Dr. K. A. Hamied: No cartels are operating in India. Cartel can only operate when the drug manufactured is the same. Take tetracycline of Pfizer. It is manufactured by three firms. When it is manufactured by more than one firm, only then cartel can be formed.

Shri R. Ramanathan Chettiar: You referred to Rs. 5.28 crores being remitted by way of royalty and dividend by those 35 firms.

Dr. K. A. Hamied: This is besides the remittance for purchase of raw materials by the 35 firms—another 6 crores.

Shri R. Ramanathan Chettiar: About 11 crores. In these raw mate-

rials, they have more or less monopoly. In reply to a question, you said that 80 per cent of the drugs are dependent on imported raw materials.

Dr. K. A. Hamied: May be 75—80

Shri R. Ramanathan Chettiar: The capital invested by foreign companies according to the RBI Survey (Nov. 1964) is Rs. 14 crores in 1962-63, p. 1387.

Dr. K. A. Hamied: It is: chemical 7 crores, pharmaceutical 8 crores, other chemicals 13 crores—in all 30 crores.

That is the total capital.

Shri R. Ramanathan Chettiar: What is the foreign content of the capital?

Dr. K. A. Hamied: About 14—15 crores.

Shri R. Ramanathan Chettiar: Out of that, 2 crores was taken away by dividends in 1962, 5 crores by way of royalty—total 7 crores.

Dr. K. A. Hamied: Out of 14 crores invested, 7 crores are taken out every year.

Shri R. Ramanathan Chettiar: In 1962-63, they had taken. Compared to that, what is the total capital of the indigenous manufacturers in the pharmaceutical and drug industry?

Dr. K. A. Hamied: I cannot say offhand.

Shri B. K. Das: When the new Act comes into force, in your opinion, will foreigners still be tempted to take patents or do you think they will not come at all?

Dr. K. A. Hamied: They would come all right. They are threatening that the Bill will have so many undesirable effects. But the fact is that they are saturated in their own countries. I met a French manufacturer recently. He is starting a factory for manufacturing antibiotics in Vietnam. I asked why he is doing it in that country when there is so much of uncertainty there. He said 'We have no

means of expansion in France. We will go wherever we can. This is the condition in Europe today.

So I assure you it is merely a threat.

Dr. L. M. Singhvi: I would like to know, in the first instance, whether a provision for compulsory licence or licence of right would not preclude the difficulty that he anticipates in respect of patenting a number of processes, because as soon a person wants to utilise or exploit another alternative process, he can always apply and use that process.

Dr. K. A. Hamied: They generally have the better and easier process which gives more yield at less cost. But in order to prevent others from jumping by other means, their scientists work out all possible means and get those also patented, whether they are workable or not. The others reach the same product, but perhaps at double the cost and at half the yield.

Dr. L. M. Singhvi: Once a provision for compulsory licence or licence of right is already there, there is no monopoly or exclusion in respect of utilisation of these alternative processes.

Dr. K. A. Hamied: That monopoly right is also for the processes which they are not using. What I am saying is that if these processes are not barred, our scientists and technical experts will have free scope to work on various chemical reactions and various processes.

Dr. L. M. Singhvi: Putting it differently, do you not think that by allowing patent of a number of processes, you are making it possible that a number of processes and technical know-how would become public property in the sense of having that information disseminated so that your own scientists would not have to do the process of research all over again? They could use any one of these processes.

Dr. K. A. Hamied: I am a chemist myself. If the process is not known

to us, I have my own processes to work. But the moment I start working, I reach a stage where I find it is already patented. I have to stop it there.

Dr. L. M. Singhvi: You mentioned that a certain monopoly is created because only one industrial licence is given in respect of a particular drug. If more than one industrial licence were given, there would be no monopoly. Is that the point?

Dr. K. A. Hamied: Not only licence given, but the manufacture started also. I have got a licence for a product for two years. But I never started it. It should be giving of a licence and manufacturing the product according to the licence within a certain time. The more the manufactures, the cheaper the product.

Dr. L. M. Singhvi: Would it be correct to deduce that if more than one industrial licence were given and if the indigenous manufacturers embarked on the manufacture of that particular commodity, there would be no monopoly and in that case, you could not find fault with the patent law but with the procedure of the licensing Ministry which grants only one licence and not more than one?

Dr. K. A. Hamied: I have never said so in my memorandum that patent law is responsible for high prices. Patent law leads to monopoly.

Dr. L. M. Singhvi: It is intended to lead to a kind of monopoly.

Dr. K. A. Hamied: That monopoly is removed by compulsory licensing or licence of right and further by the issue of industrial licences which has come to stay in our country. Then prices will come down.

Dr. L. M. Singhvi: Are you aware that in our country a lot of sub-standard or spurious drugs are manufactured.

Dr. K. A. Hamied: Mr. Borker will be able to say about that because he is dealing with it.

Dr. L. M. Singhvi: You are the witness now.

Dr. K. A. Hamied: That is the case everywhere, not only in India, but in America, England, Germany and so on. In America, there was an injection prepared on using which 10 people died instantly. Nobody blamed the American manufacturer. To err is human. It can happen anywhere. An injection made by a foreign firm when administered intramuscularly resulted in a wound 6 inches long and one inch deep. Nobody blamed the manufacturer. But the Doctor was blamed, that his method of injection was wrong.

Dr. L. M. Singhvi: That is very unfortunate.

Dr. K. A. Hamied: If it was my injection, then the Doctor would not be blamed; they would say that the Indian medicine was bad.

Dr. L. M. Singhvi: The statement is often made, and has been made before us, that abrogation or relaxation of patents might lead to a greater manufacture of spurious/sub-standard drugs, and therefore, patients would not know what they are buying.

Dr. K. A. Hamied: No medicine is being manufactured by the patentee. They are all formulations based on the chemicals manufactured by the patentee.

Dr. L. M. Singhvi: What is the extent of research being done by indigenous investors and manufacturer?

Dr. K. A. Hamied: Quite a lot today.

Dr. L. M. Singhvi: Is it self-sufficient so much so that we need not draw on research from abroad?

Dr. K. A. Hamied: Research is a very costly process. I have had discussions with government officials and ministers and informed them that research is a costly process. And in India it is ten times costlier than in America and England. The duty on the import of research instrument is 60 per cent. If it costs here Rs. 20,000, I can get it in America for 4,000 dollars. If it gets out of order, I can phone the company and can get it repaired. But here, I have to import another one in a similar contingency. Who is stopping research, government or the people? Sometimes the duty is 60 per cent, 70 per cent or even 100 per cent on research apparatus.

Dr. L. M. Singhvi: How many indigenous manufacturers are there in India in the field of pharmaceuticals?

Dr. K. A. Hamied: Among the big-manufacturers we shall count about 200.

Dr. L. M. Singhvi: What portion of the total consumption of pharmaceutical formulations and drugs is manufactured indigenously?

Dr. K. A. Hamied: Not more than 20 per cent or 25 per cent; the rest goes to the foreign manufacturers.

Dr. L. M. Singhvi: What are the reasons for our not having embarked upon the manufacture of pharmaceutical raw materials which are not covered by any patents?

Dr. K. A. Hamied: The manufacture of these things is not a small process. A costly factory, a big factory has to be started. That can be started by people who hold capital. People who hold money do not understand what a coal tar distillant is, for instance. They are not interested. If I start manufacturing, for instance, glass, they will go into it. Capital is shy. Of course they are coming to this field now.

Dr. L. M. Singhvi: Are you suggesting that even government which is supposed to be omniscient is unaware of the utility of producing these raw materials.

Dr. K. A. Hamied: Application for licences are to be made by the private people, not government. In the last two or three years, they are coming forward.

Dr. L. M. Singhvi: My last question is about the difficulties experienced by the pharmaceutical industry in working or obtaining compulsory licence in respect of patents which could be commercially exploited in the country. What are the main difficulties?

Dr. K. A. Hamied: I mentioned that for us to realise a patent after getting a licence of right or by compulsory licence requires some chemical and industrial knowledge which has developed only during the last few years.

Dr. L. M. Singhvi: It is not the deficiency of the existing patent law but deficiency of our own technical know-how.

Dr. K. A. Hamied: Plus the difficulties in getting a licence compulsorily.

Dr. L. M. Singhvi: What kind of difficulty you face?

Dr. K. A. Hamied: I have not tried to get a compulsory licence; I do not care for these licences as I do everything myself.

Shri V. B. Gandhi: You said that our production of pharmaceutical products has increased tremendously in the last few years, from ten crores to something like 100 crores. Is it right to say that it has happened under the present system of some kind of protection that is being given to the pharmaceutical industry through the existing patents law?

Dr. K. A. Hamied: No, through import control.

Shri V. B. Gandhi: Anyway, larger production helps in diminishing the need for larger imports. If this production had not taken place, we will have had to import a substantial quantity and spend the precious foreign exchange. As a result of the protection extended under the present system, the industry has been able to make a much larger production and that means we have saved so much in imports. Do you agree?

Dr. K. A. Hamied: That is not on account of the patents, as I have told you already, but on account of the ban on imports of finished products and medicines.

Shrimati Sharda Mukerjee: One of the things which other witnesses tried to impress on us that a mere relaxation of the law in itself will not ensure the growth of pharmaceutical industry in India because we have not the wherewithal in respect of the technology, capital and industrial base. What is your opinion regarding this? For instance, you mentioned the petrochemical industry. The process of the petrochemical industry is not really a great deterrent. It is a Rs. 30 crores industry which requires probably machinery worth Rs. 15 crores, etc. Is it your opinion that it is only the patent law which is a deterrent, or, is it your opinion that equally with the patent law is the fact that the other factors have not been available in the country in the last 18 years?

Dr. K. A. Hamied: Both.

Shrimati Sharda Mukerjee: To what extent?

Dr. K. A. Hamied: I cannot give the exact difference and say how much it is. But the patent law has been responsible for our not having any knowledge as how to do it. It was controlled by certain firms. American or German, and even if we had the

knowledge, it was difficult to get import of capital equipment, licenses for starting the manufactures and so on. Even then, some raw materials had to be imported, because we cannot start from the basic things. For the petrochemical industry, as I said crude oil is necessary for manufacturing petrol or petroleum products, and then for breaking them up, at some stage, the import of raw material and capital equipment was necessary, and the technical know-how was also necessary. If we had the technical know-how, we did not have the other three things; if we had the other three things, then the technical know-how was not there. So, these have to be developed. The Government is taking interest in petrochemicals; at least they have given facilities to combine with other foreign firms and start petrochemical industries, but they will have to import raw material.

Shrimati Sharda Mukerjee: Do you think that the Bill which is before us is satisfactory?

Mr. Chairman: He has given that answer.

Shrimati Sharda Mukerjee: He said that there should be a much greater relaxation in the law.

Dr. K. A. Hamied: I have answered that question already.

Shrimati Sharda Mukerjee: Regarding products *per se* and the process, you said there should be patent only for the process of the product; is it your opinion that the product should be patented or not?

Dr. K. A. Hamied: The product is patented on account of the process.

Shrimati Sharda Mukerjee: There is a difference between the process and the product.

Dr. K. A. Hamied: I know the difference, but if the product is patent-

ed, nobody can make that product unless the process is known. This is happening in India. The product called tolbutamide, is a British pharmacopoeia product. It is not a proprietary name. The patent is held by Hoescht for the manufacture of that product. 17 patents are held by them for the manufacture of tolbutamide. If we import this product, they say that the product is also patented and we cannot import it. This is the position. So, they are today in full control of not only the process but the manufacture of tolbutamide.

Shrimati Sharda Mukerjee: Do you think there should be a shorter term than what is provided in the Bill?

Dr. K. A. Hamied: I have already, answered it: 10 years.

Shri S. N. Mishra: Our main object is to restrict or eliminate the scope for exploitation which is inherent in the situation. You have suggested a few methods for doing so. The methods that you have suggested are, so far as I have been able to understand, to restrict the patent to one process. Secondly, to make provision for compulsory export; thirdly, to provide for the import of its products.

Dr. K. A. Hamied: In case the patent-holder does not make it.

Shri S. N. Mishra: Yes; these are the three ways in which the scope for exploitation could be restricted or eliminated. Could we add to them—I am just testing my idea with you, and it may be a kind of compromise—that in the case it is laid down that a particular level of production has to be attained inside the country and if that level is not obtained, the Government would be compelled to allow import? There should be a kind of compromise. The Government can take a view of the requirements or the demand or the potential demand in the country and the Government can lay down that this level of production has to be obtained through

the exploitation of the particular method and so on. If that has not come about, then the Government will be compelled to provide for import. That makes it more reasonable, when you say that there should be sufficient import.

Then, if the development of the basic drugs and the intermediates comes about in a satisfactory way, then also the scope for exploitation would be very much limited, because much of the reasons for the increase in prices may be put down to the import of many of these raw materials too, which they have been using for this purpose. So, as we have been thinking, if in the country we are able to bring about adequate development of the basic drugs and the intermediates, then much of the scope for this can be eliminated. Would you like to lay more stress on that?

Mr. Chairman: What is your question?

Shri S. N. Mishra: It is a simple question. My question is, if it is laid down that a particular level of development has to be attained by the exploitation of a particular method, would not the scope for exploitation be limited. I am trying to test the idea with the learned witness. This is a very important question for which I want to have his advice and his answer.

Dr. K. A. Hamied: Regarding the first question, it will be very good if the patent-holder or the licensee under compulsory licence or other licences, is induced—not forced or compelled but prompted—by the Government to manufacture as much quantity of that substance as is needed in the country; it will be very good if the patent-holders or the licensees try to help and produce as much as is required by the country. In case it is not possible for some reasons, you suggest that this should be imported by the Government, but there comes the foreign exchange difficulty. At the present juncture, the question of import does not arise

at all. And therefore, we are not to consider it at the present juncture of the foreign exchange position.

Shri S. N. Mishra: That is something else. The foreign exchange position may be difficult, but you should not go by that; it is only about the principle that I want to have your views.

Dr. K. A. Hamied: If foreign exchange is freely available, you will give notice to the manufacturer saying that we shall allow import, as Mr. Kidwai did when the sugar prices were going high. He issued licences for the import of sugar, to 20 people—I know it—and the sugar prices immediately came down.

Shri S. N. Mishra: So, in each case, would you like the Government to lay down the level of production which has to be attained, keeping in view the requirement of the country with regard to that?

Dr. K. A. Hamied: Yes.

Shri Sham Lal Saraf: Then the question will arise as to whether we have got the wherewithal in the country to get to that level of thinking.

Shri S. N. Mishra: The Government will take a review of the production, keeping in view all these things: the position of the resources, the demand in the country and so on. But it must not fall below a particular level of production.

Dr. K. A. Hamied: I have already replied that the production of one item depends on the import of another five items. We are lacking in the basic drugs and intermediates. I am making certain products for which I am given a licence for the raw material to the tune of three tons. I am producing a vitamin which is very important today in India and which is not made by anybody else. If the Government does not allow me to import my three tons of raw material, I cannot manufacture my vitamins. So, the question is, for the manufacture

of that much quantity laid down by Government, for the use of the whole country, the raw material required for the manufacture must be allowed by the Government. Otherwise, it cannot be made.

Shri S. N. Mishra: My question No. 2 is with regard to the development of basic drugs and the intermediates. If the basic drugs and the intermediates are produced in the country in large quantities, would you suggest that there should not be much scope for the grant of patents?

Dr. K. A. Hamied: The grant of patent is quite different. To my knowledge, not many patents are involved in basic drugs and intermediates.

Shri S. N. Mishra: There will not be much scope for that.

Dr. K. A. Hamied: The patents start after the intermediates and when we have a combination of intermediates in 20 different ways, we reach 20 different products. Then, we start patenting. As a Chemist, I have combined one or two intermediates and produced a drug for heart disease. Another man may combine two different intermediates and produce a tranquilliser. Everybody tries to combine intermediates in making new synthetic chemicals which are used as drugs and medicines. That derive for making new inventions and discoveries in the field of medicines will always remain.

Shri S. N. Mishra: The prices will come down.

Dr. K. A. Hamied: The prices will come down when competition starts.

Shri Peter Alvares: You and some other chemists have made out a case that one of the reasons for the stagnation of the Indian pharmaceutical industry is the existence of foreign patents. This implies that because you are not able to work on those foreign patents, you are not able to expand. It is a very sorry state of affairs because it implies that all the

research that has been done has been done by foreign patentees and you have nothing else to day. May I ask why is it that the Indian pharmaceutical industry has not been able to achieve a break-through in inventions of essential drugs?

Dr. K. A. Hamied: The break-through is not so easy as the Hon. Member thinks. There are so many factors involved in making a break-through. On the discovery of a new drug, whether it is for diabetics or heart disease, the break-through is a combined process of the chemist, the pharmacist, the bio-chemist, the microbiologist and the medical doctor. The combination of all these factors leads to a drug and leads to a patent.

Shri Peter Alvares: Some of the witnesses have been saying that in the interest of India, this patent law should be abrogated. It has also been said that one should not rely upon copying so much but one should try to do some sort of fundamental research. I would like to know why the pharmaceutical industry has not been able to achieve anything in that matter. Can you tell me what is the percentage of their profits which they invest in research from year to year?

Dr. K. A. Hamied: They invest quite a lot.

Shri Peter Alvares: What is the percentage?

Dr. K. A. Hamied: It will be about 20 or 30 per cent.

श्री ब्रज बिहारी मेहरोत्रा : मैं एक ही सवाल करना चाहता हूँ कि यह बिल जिसने किं फौरेन लोगों को इतना विचलित कर दिया है कि वे दौड़े चले आये हैं तो यह बिल अगर ऐसे का ऐसा एकट बन जाय तो क्या इससे देश को कुछ लाभ होगा ?

डा० के० ए० हमीद : मेरे खयाल में जरूर मदद मिलेगी ।

श्री ब्रज बिहारी मेहरोत्रा : वह किस दज तक मिलेगी इसकी जानकारी मैं चाहता हूँ ?

डा० के० ए० हमीद : मैंने उसका जवाब दे दिया हुआ है ।

श्री ब्रज बिहारी मेहरोत्रा : पेटेंट की मियाद अगर हम दस वर्ष से कम भी कर दें तो क्या आप इसे पसन्द करेंगे ?

डा० के० ए० हमीद : उसका भी मैं जवाब दे चुका हूँ

Shri Gowdh: In the present Bill, there is a provision for the payment of royalty at the rate of 4 per cent. Do you think it is reasonable or do you think that no royalty should be fixed or that the rate of royalty should be increased?

Dr. K. A. Hamied: I think 4 per cent is a very desirable percentage provided the person who takes the licence works the patent and sells it in good quantity. It depends on the sale. If the sale increases to Rs. 30 lakhs or Rs. 40 lakhs and he gives Rs. 1½ lakhs to the patent-holder for doing nothing as royalty, it is a very good return.

श्री अचल सिंह : जो आपने मेमोरैंडम दिया है मैंने उसको अच्छी तरह से पढ़ा है और मैं उसको बहुत एप्रीशिएट करता हूँ लेकिन मैं इसी के साथ साथ यह आप से जानना चाहता हूँ कि अगर हम पेटेंट बिल जोकि हमारे सामने है उसको हम हटा कर बिलकुल इटली, जापान में जसा कि बिलकुल फ्री था वैसा फ्री यहां भी कर दें तो क्या हम उसको ठीक से चला सकेंगे ?

डा० के० ए० हमीद : मेरी राय है कि हम ज़रूर चला सकेंगे और हम बहुत ज्यादा तरक्की करेंगे ।

श्री अचल सिंह : जिस चीज की कीमत एक रुपये होती है उसके दस रुपये यहां पर

बसूल किये जाते हैं अगर यह पेटेंट बिल हट जाय तो क्या वह चीजें यहां पर हमें सस्ती मिल सकेंगी ?

डा० के० ए० हमीद : अब कीमत का तो सवाल दूसरा है । अगर कोई चीज जोकि एक रुपये में आती है वह अगर हमको बारह आने में मिलने लगे तो वह ठीक ही होगा । बाकी मैं यह मानता हूँ कि वैसा होने से हमारी तरक्की होगी इल्म में और हम वह चीजें भी बना सकेंगे जिनमें कि हम को आजकल रुकावट हो रही है और हम बना नहीं पाते हैं ।

I am not talking of injections and tablets. I am talking of the raw materials and the patents for the raw materials. Tablets are being made here but the materials coming from there are patented. The drugs are not patented; they are patented only in name.

श्री रामसेवक यादव : आपने अपने मेमोरैंडम में यह कहा कि एक देश से दूसरे देश में, खास तौर से हिन्दुस्तान में जो बाहर से चीजें आती हैं और उन के दामों में फर्क है तो मैं आप से जानना चाहूंगा कि पेटेंट की कीमत बढ़ाना किस हद तक मददगार समझते हैं और क्या पेटेंटी और लाइसेंसी को वह इस शर्त पर दिया जाय कि जो अन्तर्राष्ट्रीय कीमते होंगी उनके साथ उसको चलना पड़ेगा और ऐसा होने से यह चीज दूर हो सकती है ?

Dr. K. A. Hamied: The patent is responsible for higher price to a certain extent in the early stages of the product. For instance, Cartisone was manufactured by a very big laboratory in America. They spent millions of dollars on that and the price they kept was Rs. 950 per gram. You may say that on account of the patent which they were holding, the price was Rs. 950 per gram. But that is not so. It is because they were the only manufacturers. There was nobody else in the United States

or in England or in Germany. They were selling at a price which they liked because the drug was very important and useful. In America, the scientific workers are so advanced that they started to manufacture Cartisone by 20 different methods which we in India are not able to do. They succeeded in that. When 3 or 4 firms started manufacturing the product, the price came down to Rs. 95 and today it is standing at Rs. 8 only. So, in the early stages if there is nobody coming forward to utilise that patent, then the patent-holder is the only man who manufactures the product. That is one of the causes of the rise in price. If enough number of persons come forward and take the licence and start manufacturing the product, then the price due to patent will never be high. If there is competition, the price will be less.

श्री राम सेवान यादव: पेटेंट या लाइसेंस के साथ जो गैर मुक्तों की चीजों के दाम हैं उसकी शर्त लगाने से क्या कुछ दिक्कत को दूर किया जा सकता है ?

Dr. K. A. Hamied: There are causes by which the prices of pharmaceutical chemicals are higher in India than in other countries of the world. The price of sulphuric acid is double the world price; the price of nitric acid is three times the world price; that of caustic soda is double the world price. These are basic materials required in the manufacture of various items.

Mr. Chairman: We are manufacturing all of them here.

Dr. K. A. Hamied: Yes. Nitric acid is manufactured only by Government at Sindhri; it is selling at three times the world price.

Shri K. K. Warrior: I want to draw the attention of the witness to this position: he said that we were short of the basic materials; then how can he complain that the foreign firms im-

port these materials for finally processing them?

Dr. K. A. Hamied: I have not complained.

Shri K. K. Warrior: Dr Hamied, in the event of these firms not importing, do you think that the Indian manufacturers alone should import these intermediates?

Dr. K. A. Hamied: Let me explain this. The foreign firms are holding patent for making, say, Butanol. They are holding patents for making the three ingredients. But they are not making these three ingredients here.

Shri K. K. Warrior: Are they importing finished good?

Dr. K. A. Hamied: They import finished raw materials and press them into tablets here. Why are they holding the patents?

Shri K. K. Warrior: In the absence of that, what will the indigenous firms do?

Dr. K. A. Hamied: The knowledge of manufacture of intermediates is not available here.

Shri K. K. Warrior: First you say that our pharmaceutical industry has developed to such an extent that we would depend on our own know-how and in another breath you say that, if at all we are allowed to import these intermediates or the basic raw materials, we are not able to do the finished goods. How do you reconcile these two statements?

Dr. K. A. Hamied: We are allowed to import intermediates as much as the foreign firms are allowed to do. But they have the privilege of holding a patent and not utilising it. That is what we are objecting to.

Shri K. K. Warrior: You will agree that, if at all we get the raw materials, we do not have the know-how to have the products finished?

Dr. K. A. Hamied: I am not comparing the Indian manufacturers. I am saying that the foreign manufacturers are not utilising the patents which they are holding.

Shri K. K. Warrior: What I want to know from you is this. As long as the indigenous firms do not have the knowhow, what is the harm in the foreign firms holding it back or blocking it?

Dr. K. A. Hamied: We have the knowhow.

Shri K. K. Warrior: I am sorry you are not catching my point. My point is this: some four processes are patented by a foreign firm; they are using only one and three are left out just to block....

Dr. K. A. Hamied: My argument is that they are not using even one.

Shri K. K. Warrior: Why can't the indigenous firms have their own knowhow to make use of the basic materials which can be imported?

Dr. K. A. Hamied: They are now gradually using it. Our scientific knowledge is slowly advancing; the laboratories are now working. Immediately after Independence, we were passing through difficult times; we had the import control difficulties—raw materials, even for research, were not allowed. But now we have advanced so much that today we are in a position to overcome those difficulties and we are doing some work.

Shri K. K. Warrior: Is it your opinion that, even if you had all the facilities of raw materials and the facility of the background of the chemical industry, you will not be able to develop in this country your own inventions and your own production? In other words, is it your opinion that, given all other favourable conditions, the existing Act will come in the way of your developing?

Dr. K. A. Hamied: From my experience I can say that it has come

in our way. Whether it will continue in future also after our scientific knowledge advances, I cannot say.

Shri K. K. Warrior: Till now even though there was the provision for compulsory licensing, many people did not take advantage of that. Now do you think that the provisions of Clause 95 of the present Bill—for the terms and conditions of compulsory licensing—are all right or do you think that any further advantage should be given to the licencees, apart from the patentees?

Dr. K. A. Hamied: I have already replied. So far as the present Bill is concerned, they are sufficient. If more facilities can be given, so much the better.

Shri K. K. Warrior: My question arises this way. When there is no agreement between the patentees and the licensing applicants as far as royalty and other considerations are concerned, when such disputes arise when there is no agreement and the Controller comes into the picture, do you think that the present provisions contained in Clause 95 of the Bill are satisfactory or any amendments are necessary?

Dr. K. A. Hamied: I have already replied to this.

Shri Kashi Ram Gupta: You have given a statement that Japan started its Patent Act in about 1945, after the Second World War. Some say that it was after the First World War. So I want to know whether you have based your knowledge on the fact that you have seen the document itself—the Patent Act—or your knowledge is borrowed from some others.

Dr. K. A. Hamied: It is borrowed from the general information which I have been able to receive. I cannot say from which document I have been saying this. Mr. Davar also has said the same thing.

Shri Kashi Ram Gupta: My point is this. Have you seen the Act itself?

Dr. K. A. Hamied: I have not.

Shri Kashi Ram Gupta: You say that you are exporting your own medicines. Are they patented medicines?

Dr. K. A. Hamied: Medicines we are exporting. We are also exporting raw materials of pharmaceuticals.

Shri Kashi Ram Gupta: Does your firm possess any patents? How many are there in your firm?

Dr. K. A. Hamied: About 4 or 5.

Shri Kashi Ram Gupta: Are they doing quite all right?

Dr. K. A. Hamied: 3 out of them.

Shri Kashi Ram Gupta: Are they being sent outside?

Dr. K. A. Hamied: We are not debarred from sending outside. They are not sent outside because other countries have their own laws, import control orders, etc. I am not allowed to import finished medicines from other countries. They cannot import from my country. There is no bar on me from exporting.

Shri Kashi Ram Gupta: You said that you have experience about research. When you say that it takes long time these days to arrive at any new invention, because it has become more competitive, thousands of compounds may be there and only one of utility may be found. This is a sort of gambling where a lot of money is put in. This is one argument. The other argument on the other side is this. They say that the period for which the patent may be given should be very low. How do you reconcile the two?

Dr. K. A. Hamied: 8 years or 10 years

Shri Kashi Ram Gupta: 10 years from the date of application. It may take 3 or 4 or 5 years for the same.

Dr. K. A. Hamied: They may start the manufacture before the sealing time.

Shri Kashi Ram Gupta: They can start it, but government cannot take action.

Dr. K. A. Hamied: The moment patent application is made and final specifications are submitted....

Shri Kashi Ram Gupta: He won't do it.

Dr. K. A. Hamied: There are articles manufactured in England and Bombay and it is written: Patent applied for. You can't copy it.

Shri Kashi Ram Gupta: The controller cannot interfere so long as it is not sealed. Why should one start like that when a law does not allow?

Dr. K. A. Hamied: Law does not prohibit him from starting. It does not prohibit him from starting. So long as process is known only to me and not revealed to anybody else....

Shri Kashi Ram Gupta: Unless it is sealed he cannot go to court of law. That period cannot be counted that way. You say, it may be less than 10 years.

Dr. K. A. Hamied: I am not able to know the legal point raised by the hon. Member. After specifications are completed and filed by patentee in the patent office, after that, I believe the patent applicant is protected if he makes known to the people that he is manufacturing such and such a product and that the patent is applied for; nobody can copy that under the law.

Representative of the Ministry: Applicant is not sure as to what is going to be the ultimate patent. Some of the claims may have to be amended. So it is only after their acceptance and opposition period is over that patent will be sealed and right accrues after sealing of patent. No suit can be filed under any rule earlier than sealing.

These patents are being sold in England and Germany and they say: Patent applied for.

Mr. Chairman: The witness is not competent. These are all legal points.

Shri Kashi Ram Gupta: Do you agree to the period?

Dr. K. A. Hamied: I have already replied to that.

Shri Kashi Ram Gupta: The rate of royalty of 4 per cent is enough you said. In these days it is a competitive position regarding research. Will that amount spent on research be able to be recovered by this 4 per cent of royalty?

Dr. K. A. Hamied: If licence is granted to several firms and you exclude that licence 4 per cent will be ample. He will get 4 per cent from 10 firms.

Shri Kashi Ram Gupta: You should give your opinion about the rate of royalty.

Mr. Chairman: He has mentioned that, 4 per cent is enough.

Dr. K. A. Hamied: Companies declare dividend of 6 per cent. If patent holder gets 4 per cent without trouble and labour, I don't think it is bad.

Shri Kashi Ram Gupta: What are the difficulties for companies like you to have your own know-how patented in the present conditions?

Mr. Chairman: Know-how is not patented.

Dr. K. A. Hamied: Some of our patents are well known ones. Others don't know. We want to hide our research. We apply to the patent office. We are holding a few patents. We consider it as complete secrecy of ours and nobody can copy it. If anybody copies it I will also suffer.

Shri Sham Lal Saraf: You said that the annual return by way of dividend

and know-how is over 7 crores of rupees. What is the total investment made by foreign investors in India?

Mr. Chairman: He has given that also.

Shri Sham Lal Saraf: What is the annual return for that investment plus technical know-how?

Dr. K. A. Hamied: This is 7 crores on investment of 14 crores.

Shri Sham Lal Saraf: The entire investment on the part of foreigners is only 14 crores.

Dr. K. A. Hamied: There are 35 concerns.

Shri Sham Lal Saraf: At the present stage there is lack of knowledge and there is lack of inventive genius and technology. What measures do you suggest so that we may come up to the level of the progressive nations of the world?

Dr. K. A. Hamied: This is nothing coming under patent law. There are many methods.

Shri Sham Lal Saraf: This law is brought from England for specific purpose. There are number of members speaking on different aspects of the Bill. Our feelings and fears are there. We do not want to get them from outside for all times to come. You have said that this is a reciprocal law. Today we are not yet in a stage of reciprocating with foreign countries. You know it because you are an expert. How do you suggest that we can at least reach a stage so that we will be able to reciprocate? How long will it take for us to reach that stage?

Dr. K. A. Hamied: About 20 to 30 years.

Shri Sham Lal Saraf: We are at the lowest ebb so far as development is concerned. Our advancement in science and technology cannot be

compared with the achievements of advanced countries.

Dr. K. A. Hamied: I agree that foreign countries are today very much advanced in technical know-how and ingenuity. They have been doing that work for years. But this has nothing to do with the patent law. I can write a thesis on that.

Shri Sham Lal Saraf: Unless there is collaboration we will not go ahead. About abrogation of this law, you might be knowing that in Italy when this law was abrogated for a number of years the goods manufactured were defective and of low quality. Then the Italian Government was forced to introduce a law. Today the law is on the anvil of the Italian Parliament.

Dr. K. A. Hamied: In Italy the real reason is that certain gigantic institutions do not want smaller firms in Italy to manufacture certain chemical which those gigantic firms are manufacturing. The smaller manufacturers started manufacturing them because they do not care for the patent law. Now the gigantic American and Italian firms are forcing the Italian Government to pass a law. The law is not yet passed. But who are behind this move? They are big firms. Similarly, here also lawyers are flying from Switzerland and Germany to oppose this Bill.

Shri Sham Lal Saraf: Regarding your own firm, how many of your know-how are patented under this?

Dr. K. A. Hamied: About five or six.

Shri Sham Lal Saraf: You said that as far as foreigners who are working in collaboration or on their own are concerned, to the extent of manufacturing within the country, they may be allowed patent rights. Otherwise, they import and let others also be able to import.

Dr. K. A. Hamied: If they are holding a patent for a certain product in our country and are selling it without manufacturing—I can give you so

many examples. Acromycin is one such.

Shri Sham Lal Saraf: That means importing a commodity should not come under this.

Dr. K. A. Hamied: It is so also under the existing law. Under the new Act it will be free. They can import.

Shri Sham Lal Saraf: For manufacturing a particular drug there are more than one process. A particular firm is employing just one process. With regard to the rest, it should not be allowed.

Shri K. A. Hamied: I quite agree.

Shri Sham Lal Saraf: With regard to inequality of prices ranging between what is being sold in our country and foreign countries, what would you suggest to regulate the prices?

Dr. K. A. Hamied: I do not think that by statutory regulations prices can come down.

Shri Sham Lal Saraf: With regard to raw materials for manufacturing drugs, you have said that they are to be imported. How long shall we continue to import these? Or, do you think that attempts have to be made to use our own raw materials?

Dr. K. A. Hamied: We are unnecessarily afraid of imports. Switzerland is a country to which God Almighty has given nothing—no steel, no coal, nor coaltar. Still it is the largest producer of chemicals and pharmaceuticals which have flooded the whole world. They have no raw-materials except cheese and butter and milk. How did they achieve this? Because they are allowed to import all types of things for manufacture. Government do not interfere. Their scientific knowledge and development is so high that they are now the experts. They are importing coaltar products from France, Belgium, etc. We are not allowing that. I am trying to tackle

this matter with the new Finance Minister. Please allow us to import all raw materials free of duty. Let us then see how much export we can do. If I import raw materials for Vitamin from Germany at 65 per cent duty, I cannot do anything after that. If the Finance Ministry take a very rational view on imports of raw materials, all these can be converted into finished products as Switzerland is doing. We shall also then flood the world with our things and our science and industry also will develop.

Shri Sham Lal Saraf: Would you please send a note to the Chairman on this question of import of raw materials indicating what type of raw materials will be helpful to us?

Dr. K. A. Hamied: We will.

Mr. Chairman: Thank you very much.

(The witness then withdrew)

(Dr. Abraham Patani was called in)

Mr. Chairman: Dr. Patani, Dr. Hamied has already taken three hours. Our friends are tired. Tomorrow we have got two foreign witnesses. We cannot postpone their evidence. Since you are coming from Bombay, we will give you some other time. Please excuse us. We want to give you full time.

Dr. Abraham Patani: Thank you, Sir.

(The Committee then adjourned)

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965**

Wednesday, the 2nd February, 1966 at 14.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman

MEMBERS

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2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bade
5. Shri Panna Lal Barupal
6. Shri P. C. Borooh
7. Sardar Daljit Singh
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9. Shri V. B. Gandhi
10. Shri H. K. V. Gowdh
11. Shri Kashi Ram Gupta
12. Shri Madhavrao Laxmanrao Jadhav
13. Shri Mathew Maniyangadan
14. Shri Braj Behari Mehrotra
15. Shri Bibudhendra Mishra
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17. Shri P. S. Naskar
18. Shri Chhotubhai M. Patel
19. Shri Naval Prabhakar
20. Shri R. Ramanathan Chettiar
21. Shri Sham Lal Saraf
22. Dr. C. B. Singh
23. Shri K. K. Warior
24. Shri Balkrishna Wasnik
25. Shri Ram Sewak Yadav.

Rajya Sabha

26. Shri Arjun Arora
27. Shri Vimalkumar M. Chordia
28. Shri R. S. Doogar
29. Shri D. P. Karmarkar

30. Shri P. K. Kumaran
31. Shri Shyamnandan Mishra
32. Shri Dahyabhai V. Patel
33. Shri Mulka Govinda Reddy
34. Dr. M. M. S. Siddhu
35. Shri Dalpat Singh
36. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

Dr. J. M. Hunck, *Chief Editor, Handelsblatt, Duesseldorf, West Germany.*

**Dr. J. M. Hunck, Chief Editor,
Handelsblatt, Duesseldorf, West
Germany**

*(The witness was called in and he
took his seat)*

Mr. Chairman: Dr. Hunck, the evidence that you give will be treated as public and published and distributed to our members and also placed on the table of the Parliament. Even if you want anything to be treated as confidential, it will be printed and distributed to our members. We have received your memorandum and it has been circulated to all the members. If you want to supplement anything, you may now do so. After that, the members will ask questions.

Dr. J. M. Hunck: May I supplement my memorandum now?

Mr. Chairman: Have you got sufficient number of copies?

Dr. J. M. Hunck: Not now; I can hand it over to you tomorrow.

Mr. Chairman: We will require 65 copies.

Shri R. Ramanathan Chettiar: Before Dr. Hunck begins, we would like to know something more about Dr. Hunck.

Dr. J. M. Hunck: Handelsblatt is an economic and financial paper and I have been the Chief Editor since the starting of this paper; it was started in 1946. It is a new style of financial paper where international relations in the field of commerce play a very important part and this pattern has been followed all these years. To a considerable extent, it

has also promoted our foreign trade whether export or import.

Shri R. Ramanathan Chettiar: We would like to know whether any pharmaceutical industry or drug industry in Germany has got any interest in the economic journal.

Dr. J. M. Hunck: Yes. No financial interest, i.e., capital.

Mr. Chairman: You are not connected with these industries. You are not connected with the Patent Law. You are not a practising agent or attorney for patents. Only as an *amicus curiae*?

Dr. J. M. Hunck: Yes. Some pharmaceutical industries in Germany came to know about my intention to come to India and asked me if I could try to do something for them.

Mr. Chairman: Have you got anything in writing to show that they have authorised you to come and give evidence?

Dr. J. M. Hunck: No. They asked me if and when I go to India I can do something for them.

Mr. Chairman: As one interested in the collaboration between India and Germany?

Dr. J. M. Hunck: Yes, that is my point.

Mr. Chairman: You may begin.

Dr. J. M. Hunck: Hon'ble Mr. Chairman and Hon'ble Members of the Joint Select Committee, at the outset, I would like to thank the Committee for having granted me the opportunity of appearing before you and offering my views on the Patent Bill 1965 and elucidating some of the matters mentioned already in my memorandum. India is by far the largest active democracy of the world and since independence has been a tower of justice and equality.

The fact that the Committee has agreed to invite oral evidence from other countries of the world with regard to this legislation bears ample testimony. For this reason, many nations, including West Germany, have maintained friendly relations with India.

I would like to refer to the preface which Dr. Leubke, President of the Federal Republic of Germany wrote for my last book on India entitled *India Tomorrow* which generally states that real friendships always produce new friendships, and to the words of Dr. Leubke:

“Just as the social duty of the individual to the community of our people has become a fundamental principle of our national life, so our people as a whole feel they have a social duty to the larger community of the peoples. The world will judge our people according to their willingness to aid other peoples. Indians and Germans, have co-operated in various fields; scholars from both our countries have worked in close co-operation in the spheres of arts and literary studies. This collaboration is now spreading to the field of technology. May it promote the welfare of the Indian nation and contribute to a flourishing friendship between Germany and India?”

Similarly, the Federal Minister for Economic Cooperation, Mr. Walter Scheel, mentioned on the 13th of January this year, when he held a press conference in New Delhi, that the Federal Government would do its best to help India by capital aid. Besides, it would lay special stress on technical aid which includes education and training. Furthermore, the German Government will promote joint ventures between Indian and German firms in a more intensive manner. The Indian Investment Centre told me yesterday that till September, 1965, a

total of 372 approvals for joint ventures had been accorded. These joint ventures which provide foreign capital and technical aid as well, can, as a matter of fact, only flourish in a favourable investment climate and because your government will only allow new investments in those branches which are of the utmost importance to the health and economic developments of your people, such climate may be called the cornerstone of profitable co-operation for all parties concerned.

In my opinion, international partnerships are the stepping stones to future economic stability. They are the most dependable means of overcoming obstacles. With their aid, India is bound to gain in stature as an international partner in trade and industry. Due to its vast population and the vast untapped resources of mineral wealth, India is most suitable to become one of the most important economic partners in the world. If India were to achieve this, she must lose no time in developing the home market and supplementing it by an export trade with various other countries of the world.

To quote the words of Shri G. L. Mehta, Chairman of the ICICI and India Investment Centre:

"There is nothing objectionable *per se* in obtaining assistance from other countries whether in the form of government aid or private investment obtained on fair terms and in a selective manner."

Shri Ashoka Mehta, the hon. Minister for Planning has rightly emphasised that self-reliance does not mean self-denial of the essential means of development, which is foreign aid, or even stagnation of the economy.

Mr. Chairman: You are only repeating what is already contained in your memorandum.

Dr. J. M. Hunck: There are two quotations which I have given.

Mr. Chairman: You have already said all this in your memorandum. If you want to supplement anything in addition, you may do so. It is not necessary to read the whole thing again.

Dr. J. M. Hunck: I am only giving these two quotations.

Your Committee is considering a new patent law which amongst other things gives special treatment to articles of food and medicine. Your esteemed Health Minister, Dr. Sushila Nayyar, who being also a medical doctor is extremely competent to deal with all questions concerning health, has tried as far back as 1963 to remodel patent protection for foods and medicines for the main reason that production may rise and that consumer prices might in consequence go down. The hon. Health Minister is making efforts to obtain cheap medicines for the people. But which is the best method to do so?

I have been an economist during all my life and did practical and theoretical work as a scholar, as a businessman, as a writer and as the editor of an economic paper of international reputation. In my opinion, prices will only become lower if the productivity increases and more goods are being offered in relation to a given demand. In the case of pharmaceuticals, this means, in the first place, that research and development goes on in the same intensive manner as has been done in all countries where new drugs have been produced and sold on a large scale. This research and development is very expensive. Proof of this fact is the statistical late about new drugs produced during the last fifteen years in various countries. U.S.A. figures with not less than 355 new drugs, little Switzerland with 44, West Germany with 32, United Kingdom with 27, and France with 21 and the remaining countries including

Italy and Russia produced fewer than five each.

India is trying to achieve self-sufficiency in food by 1971-72. This was even confirmed to me yesterday by your hon. Food Minister, Shri C. Subramaniam, whom I had the pleasure of meeting yesterday. This means increased crop production and cattle improvement, to say the least, according to Dr. P. V. Sukhatme, Director, Statistics Division of the F.A.O., who delivered the Dr. Rajendra Prasad Memorial Lecture in Cuttack on December 31st. Dr. Sukhatme stated that 25 per cent of the Indian people suffered from hunger and malnutrition; in the case of children it was even worse. This makes your endeavours to bring down prices for medicines and pharmaceutical products like vitamin tablets quite understandable. But one should not forget that out of about three thousand experiments in the laboratories only about one product becomes of practical use and will be a commercial success too. The question, therefore, arises, of course, whether the Government itself should be in charge of laboratory research work by means of public enterprises. Research and development of that kind includes pharmacology, toxicology and clinical trials in several hundred clinics in the country and abroad which usually takes four to six years. Very often, it happens that these trials prove to be unsuccessful or that after one or two years the disadvantageous effects of the product are observed. In the meantime, three to four million rupees might have been spent. Perhaps there might be very few directors in the public sector research undertakings who would courageously stop further trials after enormous amounts of money have already been spent and that will be lost. The private entrepreneur, however, it used to take these risks, and he must do it if solely for competitive reasons. He is possessed by the idea that that another time the lost money will be recovered by first class laboratory re-

search. The mere risk element in research might in any case be claimed as justification for higher returns. Surely, in many cases, drug firm is like an economist; its income lies in its brain power, its principal asset. Yet no one has tried to express my own earnings as a rate of return on my capital (e.g. car, office, one typewriter).

In the drug industry, the existence of patents does not restrict competition. In fact, patents are essential to competitive endeavours. Drugs have a very inelastic demand. If a patient can in any way manage it, he will consume the drugs of his doctor's choice. Price competition is therefore very unlikely to be effective. Rather it is substitute competition which typifies the drug industry, namely, rapid obsolescence of products, one drug being quickly replaced by a better one. Each company strives to discover new products and to improve its old ones. In other words, the objective must be determined from the point of view of whether it helps to promote (a) research for developing and discovering new drugs and processes by granting rewards for creativity and for the risks which have been undertaken in such research, (b) the cross fertilisation of ideas by encouraging publication of inventions rather than their suppression as a trade secret, (c) by creating a classified source of information concerning existing technology so as to aid in the conduct of research and prevent duplication of efforts, (d) by such cross fertilisation of know-how to improve and develop own know-how and thereby to become a major partner in international economy.

Less developed countries very often complain that young scientists prefer to stay abroad where they might earn more than at home. This situation is not unique to India. I can tell you that in 1962, not less than 356 and in 1963, in total 428 German scientists and technicians emigrated to the

United States. It is estimated that between 2 and 3 thousand German scientists and engineers are working in the U.S. The German Government is trying hard to get them back. So Scientific institutions are being erected on a broader scale. Their salaries will be enhanced. All over the world, skilled people are moving to the more developed countries. We have a lot of young scientists from African countries, from the Near East and also some from India who do excellent work. The British figures since the Immigration Act, analysed by the Ministry of Labour, show that from June, 1963 to June, 1964, some 32,000 employment vouchers were issued to commonwealth immigrants and over 90 per cent of these went to India and Pakistan. Development, as a matter of fact, is not simply a matter of producing skills; it is a matter of producing opportunities to use these skills. This includes laboratories, good salaries and similar incentives. First class laboratories or joint ventures or even foreign firms in India might offer a chance for young Indian scientists to be trained within the country and under conditions which he will meet when doing work within his own enterprise or with an Indian firm later on. This can only be achieved if there is a reasonable opportunity to recoup the capital invested and a reward for the risks undertaken in the shape of patent protection.

Your country, where 80 per cent of the national income comes from the private sector, has spent in 1961-62 on scientific research an insignificant amount of Rs. 46.9 crores which is Rs. 1.07 *per capita* and 0.32 per cent of the national income, while the total investment up to the end of the Third Plan is estimated at the huge sum of Rs. 30,000 crores, most of the investments being based on imported technical know-how. The Federal Republic of Germany with a population only 1/8th of the Indian population has spent in 1962 a total sum of Rs. 517 crores. Nevertheless, the so-called technical balance of payments

(which compares the imports with exports of royalties) is highly unfavourable as far as the Federal Republic is concerned. In 1962, 50 million dollars were earned by German royalties whereas German firms paid not less than 135 million dollars for royalties abroad. This results in a negative balance of payments of 85 million dollars. Another statistical data might interest you. 75 per cent of private research and development in western countries is in the fields of aviation, construction of electrical machinery and appliances and the last, but not the least, chemical industry including pharmaceuticals.

It was the German chemical industry which invested most abroad during the last few years. In many Latin American Republics, the big dye-stuff companies and Schering have established factories to produce besides the dye-stuffs, artificial fibres, fungicides, pesticides, pharmaceutical products etc. **FARBWERKE HOECHST** to give you one example, have invested abroad a total sum of more than Rs. 30 crores of which 44 per cent was invested in less developed countries.

More than half of German private investments abroad were made by 24 big firms out of which 9 hold a leading position. This means that private investment is generally being made by relatively a few big enterprises. This is quite understandable because it must be remembered that especially the chemical and pharmaceutical firms need a lot of money to invest to the advantage of the country where they are carrying on their work.

Now let us look at some leading pharmaceutical firms and their business in India. First there is **HOECHST** which participates in a joint venture with a majority Indian capital participation. **HOECHST** also plans to establish in collaboration with Indian partners a research laboratory near Bombay where Indian scientist will be usefully engaged. A few young Indian scientists are at the present moment being trained in Germany and they will, on return to India, occupy leading positions in this re-

search unit. CIBA, by the way, has built a huge research centre in Bombay where Indian scientists are busy. Next comes Bayer with a joint venture and a German part of 50 per cent. Bayer India has almost completed a factory near Bombay at a cost of Rs. 6 crores which will commence production in the beginning of autumn this year. Bayer will develop in this new factory three products which are vital to India's development. First cousthouc (rubber) auxiliaries, second pesticides, insecticides and fungicides, third pharmaceutical products against tropical diseases, besides resochine which fights malaria. In all these cases, it must be found out whether the Indian climate needs a different composition of the product, necessary to make it possible to store these products for a certain period without danger of deterioration. In other words, every foreign enterprise which does work within India must start a certain scientific work to find out whether Indian conditions are appropriate to either store their products or make the best use of it. Furthermore, these firms are experiencing with indigenous plants and active ingredients. Foreign knowledge is being matched, to the advantage of all parties concerned, with Indian knowledge. And everything should be done to protect such a development in the way of a fair patent law.

Boehringer Knoll works with a German partnership of 48 per cent., Sarabhai-Morck with 33 per cent, and German Remedies with 49 per cent. On account of the uncertainties of the Patents Bill, many German firms will hesitate to invest more in Indian laboratories. This, of course, would change at once if and when a patents law will be modded on a basis which is not confiscatory in character and on the basis of international terms to protect private property, whether material or intellectual.

In view of the most unfavourable foreign trade balance, India is highly interested in more exports. If the Patents Bill becomes law in the present form, exports will hardly be possible because expenses and risks are

relatively high and could not be covered by the extremely small margin of profits which have been mentioned so often. Foreign partners are quite prepared to agree to exports being undertaken under conditions of a fair Patents Bill. They will do so the more since prices calculated in Western Germany, for instance (which may be considered to be a hard currency area) will naturally be higher than in countries with soft currencies. This export business will, therefore, be an asset which could hardly be over-estimated in joint ventures producing pharmaceuticals.

Foreign investments in Germany might give you another illuminating example of what concentrated international co-operation means. Between September 1961 and June 1965, the amount was Rs. 777 crores, half of which came from neighbouring countries and the rest from the U.S.A. As far as German investments abroad are concerned, they come in the private sector up to 1964 to only Rs. 8,64 crores. West Germany is, therefore, in consequence of the enormous losses due to the last war, walking to a certain degree on foreign crutches. International partnership was an efficient help in the recovery of the West German industry. Capital has been made freely transferable by the then Minister of Economics, Prof. Erhard. West Germany was able to gain its feet and surge ahead. Now it is, as you might know, the second largest trading partner in the world. The principle of its system is not only to assist the economically weak but to give full cope to initiative and free enterprise.

I shall now give you another example which refers to an Asian country, Japan, after the second world war, has made rapid progress in technology and industry and accomplished considerable technical innovation. As the Japan Patent Association has explained in its memorandum which was handed over to the esteemed Select Committee, this is all due in an important degree to the introduction of foreign patents, foreign know-

how and foreign capital into Japan under the protection of Japanese Patents Laws which are in lines similar to the laws in other industrialised countries of the Western orbit. The technical balance of trade including patent royalties and payment for know-how amounted in 1964 to foreign expenditure of 146.4 million dollars while Japan received in the same year for patent royalties and know-how from abroad only seven million dollars. This again means, as in the German case, a negative balance of a sum total of 139.4 million dollars. Our Japanese friends reiterate this fact by saying that it is in this way that they have made technical progress in industries and have gained much larger sums in foreign currency by the exportation of the products thus made in Japan. It is exactly such a point of view which should be included in the basic objectives of your Patents Law and play a very important role. It is mentioned furthermore in the Japanese memorandum and I quote: "It is nations such as Japan and West Germany which held a complete Patents System and that have made progress in industry since the Second World War". And I may add in a phenomenal way.

If you consider the Indian Patents Bill under these aspects, one might say that it has restricted essential and substantial rights. The consequence mentioned in the Japanese memorandum is formulated as follows:

"If any form of property were to be used or acquired by government without payment of reasonable compensation and without due process of law, such use or acquisition would offend the fundamental rights which we have always jealously safeguarded in a democratic country and India is considered as a model case of democracy."

The effect of this Bill, if enacted, is tantamount to taking of property under power of Government without due process of law, without provision for an appeal to a judicial tribunal

and without just compensation. To give some data about the recent economic development of Japan, exports have risen in 1965 by 26 per cent after 23 per cent in 1964. The balance of payment came out with additional rupees 96 crores. The German balance of payment by the way in comparison in 1965 ended, for the first time since 14 years due to enormous imports caused by high prices, with a deficit which can be appraised at about rupees 780 crores. And may I add to finish up the Japanese case that the special adviser to the Minister of Foreign Affairs, Mr. Ohkita, mentioned some days ago in New Delhi that though the economic planning agency of the government had produced several plans since the end of World War II, the Japanese economy was predominantly a private enterprise and the per capita income in 1964 stood at 2900 rupees, by far the highest in Asia.

Reference is often being made to Italy and its patent laws. Everybody knows that the Patent Laws in existence have been reformed under the domination of Mussolini in 1939. There is practically no patent protection for pharmaceuticals in Italy, with the consequence that small and obscure firms are flooding the market, but nevertheless, international products are being preferred. HOECHTS, for instance, is in the market with 76 per cent of diabetes tablets consumed whereas 37 Italian firms deliver only 24 per cent. The same is the case with products of other firms who are research oriented. The chemical industry of Italy, as you might know, however, enjoys patent production and has developed a high international standard, if you take f.i. Montecatini and Edison.

Now the Italian pharmaceutical industry wants international exchange of technical progress and the Italian government has drafted a bill according to which patent protection shall be granted for processes to manufacture drugs and medicines. The draft

'bill is before the Judicial committee of the Italian Senate.

On the other hand, the European Economic Community has prepared a European patents law which is in conformity with an agreement of the European council to harmonise the sale of all kinds of drugs. This of course will influence action in Italy as well as in Great Britain. May I add that the Council of Europe embraces European countries belonging to the European economic community as well as to the European free trade area and consequently all the States of western part of Europe. A convention on the unification of 13 points of substantive law on patents for inventions has been concluded in November, 1963. According to this convention of the Council of Europe protection will be granted to the substance itself produced by chemical processes in so far as the substance does not relate to food stuff, luxury articles, provisions including sweets, tea, coffee, beverages and tobacco products. Italy, as a member of the Council of Europe, is obliged after a limited period to grant patent protection for such substances produced by chemical processes. As you might perhaps know, the Soviet Union has already adhered to the international convention for the protection of industrial property known as the Paris convention. Further, in the middle of 1965, the Soviet Union has introduced a trade mark law. At a conference held at Munich recently between the representatives of Eastern and Western Europe including the Soviet Union, the above-mentioned information was again disclosed. This indicates reinforced preparedness for international exchange between east and west European countries including the Soviet Union of technical information and the use of patents upon payment of reasonable terms. Since the adherence of Soviet Union to the Paris convention, not a single case has been known according to which the Soviet Union has violated the patent rights. As far as the new Indian patent law is concerned, judi-

cial appeal seems comparatively to be absolutely necessary.

Regarding the term of validity of a patent the exceptional case of ten years only for drugs and foods seems to be discriminatory. It is a basic experience that discrimination tends to breed new discrimination. It is suggested that the term should be ten years at least as of the date of sealing of the patent instead of the date of filing the complete specification.

Sections 5 and 47 provide that for food, medicine or drug patent protection shall be only for processes and to the products produced by such processes. But no provision is made concerning the burden of proof. This should lie in any case with the infringer. And if a licence is granted under a patent or another person is authorised to work the invention for reasons of vital importance, the licensee should start immediately to produce and not be allowed to import only. In any case the licensee should pay reasonable royalty. If a country changes its patent law it is to my mind a bad thing in so far as it offends the international code of fair behaviour and science and development in the whole world in a detrimental way. India, however, has a special place; it is a guiding lighthouse to many countries, especially those which are less developed. For this reason, pharmaceutical firms all over the world are so much interested in the way the Indian government proceeds with the patents Bill. There is always a way to find a solution which gives comfort to both parties.

If for instance prices seem to be extremely high, why not follow the French example: after a period of three years from the date of commercial exploitation, the patentee has to appear before an official committee which controls the whole cost structure and then has to come to terms regarding a fair and decent price. This of course can only be done on

condition that the representative of the government is not just interested to take over but to have the firm calculate a fair price. Needless to say that, for instance, big institutions like Securo Social in Latin America get a substantial discount. The Indian government has always been flexible if necessity arises. I might refer to the substantial tax reductions which will be granted for the erection of the new fertiliser factories.

The late Mr. Lal Bahadur Shastri wanted a purely pragmatic approach to problems. The Shastri legacy in the economic and scientific field is determined pursuit towards self-reliance in a most pragmatic manner which gives the best advantage possible to the Indian people without hurting the foreign investor sincerely. Solid business with a social touch is what you need in the new patent law. This is in conformity with the words of our President Lubuke which I quoted at the beginning of the memorandum. It reminds me of what the foreign minister of Kenya, Josef Murumbi, told me once: "As far as international co-operation is concerned, we do not want charity because charity only comes once. Therefore, we want solid and fair business which helps both the parties."

Thank you once again for having given me an opportunity to place my views before you and, Jai Hind.

Shrimati Sharda Mukerjee: Mr. Hunck, your memorandum which was circulated to us and also your explanation have been of considerable help to us. We would like to ask one or two questions. Would you like to tell us, in regard to the modern research which is being conducted in Germany in relation to drugs, how much of international co-operation you have in modern drug research, for instance? I mean the collaboration between your country and another foreign country, for instance, or foreign countries.

Dr. J. M. Hunck: I can only answer in general terms. I gave you the instance that we have much more royalties from abroad. I should appraise it at about 30 to 40 per cent, and a few of the drugs we are producing in Germany are being produced on the basis of royalties and patents from abroad.

Shrimati Sharda Mukerjee: I am afraid I did not put my question so directly; what I mean to ask is, in the research laboratories themselves, is there any work being conducted in collaboration between Germany and foreign countries.

Dr. J. M. Hunck: No, probably not.

Shrimati Sharda Mukerjee: When you say that international cooperation between India and Germany would be affected by this measure, do I take it that you only refer to the investment aspect or you refer also to the research aspect?

Dr. J. M. Hunck: I should think both, because research also means investment: sending exports to India and invest an amount of money and use technological work and find out the methods which may suit the climatic conditions of India, and find out indigenous plants and all those things. That means investment, of course.

Shrimati Sharda Mukerjee: As you are aware, this Bill is an amending Bill, coming after many years since the existing Act was brought into effect and which is now in force; the present Act is almost 50 years old. I think it has been the experience in this country that there has been very little collaboration in research in regard to drugs and other things. We feel that while European countries are anxious to invest capital here, they are not equally anxious to part with their knowledge.

Dr. J. M. Hunck: They have started the collaboration on a laboratory scale. The first step was, as you

might remember, the Indo-German co-operation with firms in Asia. This started only in 1957-58, that is to say, only six to eight years back, and within these eight years, the first step was to export to India; the second step was to establish its own ventures; for many years, the first difficulty was one of exchange; there was not enough foreign exchange to transfer our profits back to Germany, and for this very reason the German firms told me in the last few years that they even prefer to invest this money in India; probably Hoescht does it and Bayer does it, and similar other firms will do so. Since they were told that this co-operation is of advantage to both parties, they might call new items of research which can be transferred to Germany; it is in fact, not foreign exchange, but it is only intellectual money which can be exchanged with Germany and can be used in Germany for any other country where the climate and other conditions may be similar. The Germans have picked up this idea of erecting more laboratories in your country, especially—India—which has a huge market. I can give you more items.

Shrimati Sharda Mukerjee: As you have rightly said, India has a huge market, but India wishes to develop markets outside India, and it is to safeguard that that this Bill has been presented to Parliament.

Dr. J. M. Hunck: I think I have mentioned in my little memorandum that exporting is another thing; there might be other conditions and countries where exports are possible, especially your neighbouring markets in Asia, and these joint ventures are quite willing to do so. I see that there is quite a lot of such joint ventures of two or three firms here in Delhi, who do export business. Why should it not be done in pharmaceutical interests, which are specially prepared for this part of the world and this part of Asia?

Shri Bibudhendra Mishra: Would you please tell us the exact provision in the Bill to which you object?

Dr. J. M. Hunck: I mentioned in my speech that I consider patents as a method to restrict production or a certain amount of development for a given period to one firm. That is one objection.

Shri Bibudhendra Mishra: I hope you are acquainted with the provisions of your German patent law.

Dr. J. M. Hunck: I have generally presented my ideas. To a certain degree, I am aware of those laws. Basically, I am.

Shri Bibudhendra Mishra: In Germany also, articles of food and medicines—the products are not patentable, but only the process is patentable.

Dr. J. M. Hunck: Patents apply to both.

Shri Bibudhendra Mishra: I find from the United Nations publication that both in Germany and Japan, only the processes are patented, and if the patent is not worked inside the country, they can be revoked.

Dr. J. M. Hunck: But you have to pay compensation and you can apply to the court about it. It is quite natural.

Shri Bibudhendra Mishra: But there is a provision that if it is not worked inside the country, it can be revoked. Also, in the public interest, there is a provision that there can be compulsory licence.

Dr. J. M. Hunck: Yes; it must be, if it is a question of emergency.

Mr. Chairman: That is what this law is doing. What is your objection; those provisions are being sought to be enacted here; so, what is your objection?

Dr. J. M. Hunck: The objection is, it is not clearly explained which are those public undertakings and cases; secondly, by licensing, it does not enable us to go to court against it.

In Germany, there is a special court in Munich which deals with patents and with violations of patents.

Shri Bibudhendra Mishra: This book, published by the United Nations, *The Role of Patents in the transfer of technology to developing countries*, also refers to Germany, and the reply given by the Government of Germany says: "Free use of invention by order of Government in the interests of the public".

Dr. J. M. Hunck: Only with compensation.

Shri R. Ramanathan Chettiar: The compensation may be illusory.

Dr. J. M. Hunck: It must be a fair compensation.

Shri S. N. Mishra: What counter-vailing actions have you adopted in your country to contain the evil effects of monopoly arising out of patents?

Dr. J. M. Hunck: We do not consider that as an evil effect of monopoly. I have told you about the prices and about obsolescence.

Shri S. N. Mishra: If the prices do not happen to be at the international level, what action do you take?

Dr. J. M. Hunck: We do not take any action. We leave it to the free competition between the producers. Whether the price is high or not, the physician who recommends a drug and the patient who takes it prefer a drug prepared by a first class firm in which they have got confidence.

Shri S. N. Mishra: What is the amount of foreign investment that has taken place in drugs in Germany?

Dr. J. M. Hunck: I cannot give the answer at the moment.

Shri S. N. Mishra: You mentioned the figure of 777 crores so far as foreign investment is concerned. Pro-

bably that comprises both on government account and private account?

Dr. J. M. Hunck: Only private account.

Shri S. N. Mishra: Since you are dealing in the field of drugs, was it not reasonable for us to expect you to give some figure about foreign investment in the field of drugs?

Dr. J. M. Hunck: I can give it to you later; not at the moment.

Shri S. N. Mishra: What is the ratio of foreign patents to the indigenous inventions in Germany?

Shri Peter Alvares: In the subject-title of your memorandum you have said "Development of Indian Pharmaceutical Industry to serve the public—Memorandum pleading for competitive prices by fair competition". I do not know if you are aware that the prices of foreign patented pharmaceutical products in India are two to three times the cost in European countries. The other factor is most foreign pharmaceutical companies have secured a monopoly by patenting all processes in this country and thereby preventing the broad-based growth of the pharmaceutical industry. In view of this, how do you justify your own thesis that if the field is kept open for foreign enterprise and participation, the present system as it is will serve the Indian public? The prices are manipulated and the industry is not allowed to grow because of monopolistic tendencies.

Dr. J. M. Hunck: Of course, prices of many other things are also higher in India. An Italian Fiat car costs double the price here as in Italy. You might know the reasons why it is so. Of course, there might be other reasons—the price structure, cost of production, market situation, etc.

Shri Peter Alvares: That is not very correct, because these patents are not worked in India. They are

imported. If they were worked in India, I can understand the argument that cost of production in India is higher.

Dr. J. M. Hunck: I have seen statistics where prices of drugs in India are not high.

Shri P. S. Naskar: It is an acknowledged fact that the price of a particular brand of patented medicine in India is higher than the so-called international price prevailing in other countries. To pinpoint his question, can you tell me in the last 15 years how many patents have been taken by the German firms in India and how many of such patents are worked in India?

Dr. J. M. Hunck: Unfortunately I have no figures about it. I will try to get it.

Shri Peter Alvares: In the last para of page 3 you say,

"The new Bill will not encourage in particular the foreign patent holders to work the patents in India."

This is what the Bill wants to do, i.e., to try to compel foreign patent holders to work them in India. At present there is no such compulsion. That is why we have the situation where all patents are registered here, but the products for sale are imported from outside. The present Bill will try to do away with that. I do not understand how you say the Bill will not encourage the physical working of patents in India.

Dr. J. M. Hunck: As far as I know, the German firms do not see that there is enough security or the risks may be too high to start laboratories here.

Shri Peter Alvares: At the moment there is no compulsion to start a laboratory to work any patent in India. This Bill will try to do something like that in a half-hearted manner. But you do not want that pro-

vision and you want the existing provision to continue whereby it will not be required that a patent is compulsorily worked in this country. So, this statement is not correct from the point of view of what the Bill seeks to do.

Dr. J. M. Hunck: I see it in a different way. At present there is no opportunity for a foreign patent holder to work on it in this country.

Mr. Chairman: Why is there no opportunity? If he takes a patent here and does not work it here, what is the government to do?

Dr. J. M. Hunck: Government can stipulate that he has to work it here. As I have said in my memorandum, you can always find a way which satisfies both parties.

Mr. Chairman: The very object of having patents is in the interests of the country.

Dr. J. M. Hunck: Yes.

Mr. Chairman: Supposing a patentee does not work that process and produce the product in India?

Dr. J. M. Hunck: After some years he should produce it here.

Mr. Chairman: That is what the Bill tries to do.

Dr. J. M. Hunck: But you must give decent conditions and fair prices on which he can work.

Shri Peter Alvares: India has a low cost structure and America has a higher cost structure. The prices here are four times the prices in America and in real terms the price of a particular medicine will be ten times more in India than what it is in America.

Dr. J. M. Hunck: There is no competition from other international firms.

Shri Peter Alvares: How can there be any competition?

Mr. Chairman: You hold the monopoly and you will file a suit in the court if your patent rights are violated.

Dr. J. M. Hunck: If you allow more firms then there will be competition.

Shri P. S. Naskar: You said that if a patentee after taking a patent inside this country does not function for two or three years then we should revoke that patent. But then you will ask us to pay him the compensation.

Dr. J. M. Hunck: Of course, he is entitled to get some compensation for his patent which you use.

Shri P. S. Naskar: In your speech you laid emphasis on the research part of it. Could you give us an idea, taking any particular pharmaceutical firm in Germany, as to how much money is spent on research, how much on advertisements and so on?

Dr. J. M. Hunck: On research and development they spend about 15 per cent and on advertisements it is substantially less. We in Germany advertise very little because the pharmacies, the physicians and others use what is produced.

Shri Gowdh: You have chosen three or four items with which you disagree. One of them is the question of royalty payable to a patentee. You say that 4 per cent is very low. What in your opinion is the percentage that should be given as royalty?

Dr. J. M. Hunck: In Great Britain they had legal proceedings and 18 per cent was given.

Shri Gowdh: Is it your opinion that no percentage should be fixed?

Dr. J. M. Hunck: Yes.

Shri Gowdh: You say that if the life of the patent is reduced from 6 years to 10 years it is not workable,

it is not profitable to the patentee. What do you think should be the reasonable period?

Dr. J. M. Hunck: My idea was ten years. I was saying that it takes about two years in between the date he applies and the date on which he receives the patent.

Mr. Chairman: It is 18 years in Germany from the date of application. Here in India it is now 16 years and now under the Bill it is made 14 years and 10 years from the date of application for medicines and food articles. It actually comes to 12 years. That distinction is made in many countries.

Shri Gowdh: Are you aware of any instances in the recent years where a patented drug has become obsolete or out of date within five years because of the invention of a more effective drug?

Dr. J. M. Hunck: There are many instances of such drugs.

Shri K. K. Warrior: In his memorandum, on page 3, Dr. Hunck says:

"Paragraph 48 enables the State to confiscate all patents without giving any reason or compensation".

Clause 48 is only for certain governmental purposes. Will he explain why he has used the word "confiscation"?

Dr. J. M. Hunck: If you take away without compensation, I should call it confiscation.

Shri K. K. Warrior: Is there no such provision in any of the Acts in Germany?

Dr. J. M. Hunck: No, it is not there in any other country.

Shri K. K. Warrior: Suppose a situation arises, for defence or in the case of some epidemic or some such thing, where the Government thinks it is necessary should not the Government have the right to import any patented material—either the process, the

material or the product—from outside?

Dr. J. M. Hunck: Of course, it has that right.

Mr. Chairman: The provision in the West German enactment says that the free use of the patent invention is possible by the order of the Government in the interest of public welfare and security.

Dr. J. M. Hunck: Of course.

Mr. Chairman: That is all what we want to do by this Bill.

Dr. J. M. Hunck: It is confiscation if it is done without proper compensation.

Shri K. K. Warrior: Suppose the patentee is not in a position to supply enough of that product during a crucial period like an emergency or when there is an epidemic how can the Government safeguard the interests of the community?

Dr. J. M. Hunck: But why do you not pay compensation? That compensation is for his intellectual property.

Mr. Chairman: In your enactment relating to patents there is no question of compensation. It refers to free use of patent invention by the order of Government in the interest of public welfare and security. So, why do you object to this provision in our Bill? After all, Government will exercise that power only for the welfare of the country and for the security of the country.

Dr. J. M. Hunck: Of course, they can do it, but the patentees should be compensated.

Shri K. K. Warrior: Then I come to clause 87, relating the licensing rights, to which you have raised objection. Is it not a fact that similar provisions exist in patent laws of developed countries?

Dr. J. M. Hunck: No, I do not think licensing rights in the pharmaceutical field for patents is given anywhere else.

Shri K. K. Warrior: Suppose a firm in a developed country takes patent rights for a number of processes for the same product just to block the entry of others into the field, creating or acquiring a monopoly in that product, should that be allowed? Suppose that party is not using all the processes but only one process, should not the local inventors or research workers be given some elbow room to utilize the other processes?

Dr. J. M. Hunck: Of course, provided the party concerned has the brain, the knowledge, the know-how. But no such thing is mentioned in the Bill. It simply says that the licensing rights can be given. It should specify that it will be given only to those who have got the know-how and who know the trade secrets, because they are much more important than the patent proper.

Shri K. K. Warrior: In a contingency where a firm tries to block the entry of others by patenting all the processes, should not Government enter the field and encourage the local manufacturers to produce them?

Dr. J. M. Hunck: But how many patents are there in India which stands in the way of curbing the initiative of the local inventors from evolving some new processes? Not many. Why should we concentrate on those few unscrupulous firms and generalise?

Shri K. K. Warrior: All right I will not generalise. But in case all the processes are patented only to block the development of indigenous invention, should there be any objection to a provision in this enactment which will lift that blockade and allow free open competition?

Dr. J. M. Hunck: If you kindly make it a little more specific, I can try to answer it. If some one does

something which is against the welfare of the community, It is quite natural to take action against him. But that is an exceptional case.

Mr. Chairman: It is only in an exceptional case that Government will use those powers. Do you mean to say that the Government will use those powers indiscriminately?

Dr. J. M. Hunck: As far as I know sections 87 and 88 say that patents relating to food and drugs shall automatically be endorsed with the words "licensing rights". Furthermore, even a patent held under the old Act will automatically be endorsed with these words from the commencement of the present Act. No appeal is possible against that. The Controller can utilise the patent at any time before the terms of the licence are mutually agreed upon. It is retrospective. He gets it immediately before the terms of the licence are agreed upon.

Shri K. K. Warrior: Then I come to the question of royalty. You say that 4 per cent royalty is too low. But it is not as if the patent right is given to somebody and all of a sudden 4 per cent is fixed. There is sufficient scope for all sorts of agreements between the patentees and the licensees. This provision is only to safeguard against extorting exorbitant royalties. It is only there the Controller comes in the way and fixes 4 per cent. Is it not sufficient?

Dr. J. M. Hunck: You are referring to an exceptional case. But I am sure it is not the case everywhere.

Shri K. K. Warrior: It is not covering all licenses compulsorily. It is only when the other provisions are not satisfied, in the last resort, it is done under section 88.

Mr. Chairman: It is there in the German enactment also. It says that by declaration to be published and registered any patentee may permit any person to use his patented inven-

tion subject to adequate compensation.

Dr. J. M. Hunck: Under this provision anybody can apply for this licence to the Controller and he has to give it immediately without waiting for proper agreements.

Shri K. K. Warrior: What will be the impact of this Bill when enacted on the export market of West Germany, so far as medicines, pharmaceuticals and intermediates are concerned?

Dr. J. M. Hunck: On the West German pharmaceutical industry, you mean?

Shri K. K. Warrior: What is the assessment of those friends who were happy in giving you the brief and asking you to represent them?

Dr. J. M. Hunck: Those friends, as I told you, are very happy to continue to co-operate and develop more co-operation with India.

Shri K. K. Warrior: We welcome that co-operation. The question is: What will be the impact, adverse or advantageous, on the West German industry if this Bill is enacted, according to their assessment or according to your assessment?

Dr. J. M. Hunck: It depends on individual cases; but, basically you must allow the man who invests money to get a fair profit out of his money if the risk is in a decent limit. There is nothing wrong about it.

Shri K. K. Warrior: I understand from your statement that India stands to suffer, but what will be the impact on the West German industry, according to their assessment or according to the assessment of any of the associations which the pharmaceutical industry has or according to your own personal assessment, if any, and not on German investments in India?

Dr. J. M. Hunck: In what respect?

Shri K. K. Warior: In their exports to India or in their taking out patents here for their exports and processes.

Dr. J. M. Hunck: I am afraid, there may not be the desire to establish a laboratory and collaboration will not be as much as it has been up till now.

Mr. Chairman: Please look to clause 88(5). Compensation is provided there. It is not expropriation.

Dr. J. M. Hunck: Expropriation was only under section 48.

Mr. Chairman: That is, for the purposes of Government.

Dr. J. M. Hunck: For the purposes of Government or if anyone does it on behalf of Government.

Mr. Chairman: If it is for Government purposes, Government should reserve those powers. Do you not agree? Many countries have done that. UK has done it; Germany has done it.

Dr. J. M. Hunck: Then we come back to the same old question, that is, decent compensation should be paid.

Mr. Chairman: But you have no objection to the power being retained if compensation is paid.

Dr. J. M. Hunck: Of course. It is quite natural if a country is in a state of emergency and a state of defence.

Shri R. Ramanathan Chettiar: When the Government exercises that power, no compensation is paid under the German patent law.

Dr. J. M. Hunck: I am sorry, there are no cases of taking over patents without compensation. Compensation is paid.

Mr. Chairman: Not even for security purposes?

Dr. J. M. Hunck: It pays for that.

Shri R. Ramanathan Chettiar: It may be illusory or nominal compensation.

Dr. J. M. Hunck: It depends; but at least it is fair compensation, not only nominal. Government does not take anything away from only a small group of people. The taxpayer has to pay the money. He will be compensated.

Shri Kashi Ram Gupta: You must be aware of the fact that during the last ten years there have been patent agreements by German firms in this country and the old Act has not put any limit on royalty, still under the agreements, as they stand, generally the royalty fixed is not more than 8 or 10 per cent?

Dr. J. M. Hunck: Yes, I know.

Shri Kashi Ram Gupta: Agreements entered into during these ten years do not have a rate of royalty more than 8 or 10 per cent—that is the maximum; it may be 5, 4 or 6 per cent even. Then, on what grounds do you say that there should be royalty of 15, 16 or 18 per cent?

Dr. J. M. Hunck: I mentioned the British case. You asked me what royalty should be paid. Then I mentioned what is paid in Great Britain.

Shri Kashi Ram Gupta: In view of the fact that German firms agreed to a royalty of less than 8 per cent, as a journalist you ought to have an idea why the Government of India is going to fix it as 4 per cent in special cases. Have you studied it from that point of view?

Dr. J. M. Hunck: May I tell you that royalties are paid in the course of joint ventures of German firms co-operating with Indian firms? Of course, royalty is one small profit which comes out of it; but, there is besides, another kind of profit for producing and selling those goods which may be shared between the

Indian and German partners. They might have additional profit in their general business in this joint venture.

Shri Kashi Ram Gupta: Whether they make additional profit or not is not the question here; the question is about patent royalty to be fixed by the Controller. Under the agreements that royalty is less than 8 per cent, which means that Indian conditions are suited to them for a lower royalty. If it is so, your argument about this clause does not stand.

Dr. J. M. Hunck: 4 per cent is only half the amount of 8 per cent.

Shri Kashi Ram Gupta: But that 8 per cent is the maximum; there are cases of it being 5, 6, 4 or 3 per cent.

Dr. J. M. Hunck: Royalty is besides profits out of mutual business.

Shri Kashi Ram Gupta: The Controller has nothing to do with profits; he fixes it about the patent.

Dr. J. M. Hunck: German firms do go into negotiations regarding the royalty.

Shri Kashi Ram Gupta: Every firm has to negotiate under the old Act.

Dr. J. M. Hunck: In case there is a joint venture, besides royalty he gets additional profit out of that, so, he agrees to royalty of 8 or 6 per cent.

Shri Kashi Ram Gupta: You say that collaboration is welcome. When it is welcome, the net result is there. Everybody knows it. When they will get profit from it, according to you, there should be the least objection to lower royalty.

Dr. J. M. Hunck: Does that 4 per cent include royalties? Or, does it also refer to know-how agreements?

Shri Kashi Ram Gupta: Know-how has nothing to do with it.

Dr. J. M. Hunck: But the Chairman just now referred to some section where it is said "royalties and similar things".

Shri Bibudhendra Mishra: It says: "4 per cent of net ex-factory sale price in bulk of the patented article".

Dr. J. M. Hunck: But does it refer to royalty?

Shri Bibudhendra Mishra: That is a sort of compensation.

Shri K. V. Venkatachalam: Royalty and other remuneration.

Dr. J. M. Hunck: What is meant by "other remuneration"?

Shri K. V. Venkatachalam: It does not include know-how.

Dr. J. M. Hunck: I am happy if it is so.

Shri R. Ramanathan Chettiar: It says, 4 per cent royalty and other remuneration. It is not clear.

Draftsman: The idea is that the maximum that is recovered should not exceed 4 per cent. Supposing we simply use the word 'royalty' only, the object of the provision may be defeated by using some other expression, e.g., royalty 3 per cent, some other thing 5 per cent or 6 per cent. Whether in the form of royalty or otherwise, all told, it should not exceed 4 per cent.

Shri Kashi Ram Gupta: That has nothing to do with the know-how.

Dr. J. M. Hunck: Could there be other agreement regarding compensation for know-how? Is it included in this? I was told just now that it includes everything. I am not sure.

Shri Kashi Ram Gupta: Supposing the word 'remuneration' is not there, are you then agreeable to this?

Dr. J. M. Hunck: Yes.

Shri Kashi Ram Gupta: You have said that there are huge expenses on research and, therefore, care should be taken to see that all those expenses are covered. As you know, in India there is mixed economy. Here, the Government has also got its own laboratories and they give the facilities and there may be further improvement in that direction. Then, your argument of spending very heavy amounts on research does not stand here. Your argument may be from the German point of view and not from the Indian point of view. In India, the Government also gives facilities in the field of research. When this is the case here, the question of asking for the extension of the period of patent or about the rate of royalty does not stand on that ground.

Dr. J. M. Hunck: Why should the research cost less for the Government than for the private people?

Shri Kashi Ram Gupta: Whether it is lower or higher, the question is this. You say, in India, the German Company spends a huge amount on research. But actually, the amount spent on research can be huge only if the Company is doing it independently. In this country, there are Government laboratories also, and there are other ways of doing it.

Mr. Chairman: Why argue with him?

Shri Kashi Ram Gupta: He has to see to the conditions obtaining here. We are drafting the Bill according to our own conditions.

Therefore, we have given the period as 10 years because we know the amount spent on research will not be so much as they say.

You are a journalist and you should know the position obtaining here and in Germany and other countries. You should examine it.

Shri J. M. Hunck: I am surprised how the time taken on research for

certain products should be shorter here than in other countries.

Mr. Chairman: You need not argue.

Shri Kashi Ram Gupta: I am not arguing. I am linking it up with the period of the patent. We have made it 10 years. He is objecting to that; he says that that is not enough. We say that the period of 10 years is enough.

Mr. Chairman: He wants extension of time because they have to spend a lot of money on research in Germany.

Shri Kashi Ram Gupta: My point is that when they have to come here, they are to do it here.

Mr. Chairman: Research is done in Germany also.

Shri Kashi Ram Gupta: He is a journalist also. He ought to know the position obtaining in other countries including India.

Dr. J. M. Hunck: We should always take into account the research cost which the firm undergoes in all places, not in India proper only.

Shri Kashi Ram Gupta: Have you thought of some suggestions by which the Indian inventor may benefit?

Dr. J. M. Hunck: Whether it is an Indian or an alien inventor, everyone should benefit in the same way or everyone should get the same incentives by way of royalties or by way of fair compensation. Whatever I have mentioned does not refer to foreigners only. It does refer only to scientists, whether foreign or Indian. What I suggested was that more Indians should be trained in laboratories which are built up by joint ventures.

Shri Kashi Ram Gupta: You have stated that there should be proper investment climate in India. Do you mean to say that the present Act provides proper investment climate and that the amended Act will not

provide proper climate and, if so, what are your reasons?

Dr. J. M. Hunck: I am afraid that the new patent law will not provide comparably favourable investment climate.

Shri Kashi Ram Gupta: How does he explain the reasons?

Mr. Chairman: He has already replied.

Shri Kashi Ram Gupta: Can you give us an idea about the time taken generally for such research in your country and the percentage, in general, of the amount that is spent on research?

Dr. J. M. Hunck: I have already given the answer—10 to 15 per cent is being spent on research.

Shri Kashi Ram Gupta: On the basis of your knowledge during the last 10 or 15 years, may I know how much has generally been the time taken on research on certain patents?

Dr. J. M. Hunck: It takes from 2 to 4 years.

Shri Sham Lal Saraf: First of all I thank you for the expression that your country owes some social duty to this country also. In this country we want advanced research, know-how and raw materials in order to be able to set out foot on this modern industry of drugs and pharmaceuticals. May I know how and in what way your country can help us in that?

Dr. J. M. Hunck: Advanced research has to be done only when basic research is available.

Shri Sham Lal Saraf: That, I know. What I am asking is this. We are grateful to you for the sentiments that you have expressed on behalf of your country. We need three things, namely, advanced research, technical know-how and raw materials, in order to be put somewhere on the map of manu-

facture of drugs and pharmaceuticals. How and in what way your country can help us in that?

Dr. J. M. Hunck: I gave you instances of Hoechst and Bayer, the new factories which are established in Bombay. Young Indian scientists are sent to Germany to be trained and later on to take over leading positions in these firms. This is a kind of co-operation which is important and which gives advantage to both the parties. We might give you our experience and by this co-operation of both the partners, I think there will be a good result within a few years.

Shri Sham Lal Saraf: Therefore, keeping that in view, do you feel that it is all the more necessary that whatever firms get their patents in this country should invariably manufacture and prepare these drugs and pharmaceuticals within this country?

Dr. J. M. Hunck: Yes; it should be done within this country; that is necessary.

Shri Sham Lal Saraf: Today the position is that most of the foreign firms who have got their patents registered here, are not preparing the drugs here.

Dr. J. M. Hunck: The preparation should be done in this country. That is the idea of co-operation.

Shri Sham Lal Saraf: As a columnist, I would ask you what would you consider a reasonable return for investment-cum-knowhow-cum-all that the patentee imports from a foreign country.

Dr. J. M. Hunck: I am afraid it differs from branch to branch.

Shri Sham Lal Saraf: I am talking of drugs and pharmaceuticals.

Dr. J. M. Hunck: As I told you in the beginning, I have not myself had enough practical experience to know how the cost structure is in the production of pharmaceuticals.

Shri Sham Lal Saraf: What I mean here is this. When a drug or a pharmaceutical is in a position to be commercialised, what is the earning; that is, from the day it is commercialised, what would you consider to be a reasonable annual return for all the investment, including the royalty, etc.? What percentage would you consider to be a reasonable return?

Dr. J. M. Hunck: This is a very ticklish question. I cannot tell you whether it is 50 p.c. or 20 p.c. I gave you the suggestion as to how it is done in France. There, he presents his cost structure and they find out a decent price considering all the cost elements. That would be a fair thing.

Shri Sham Lal Saraf: At the beginning you said that, after the present Bill came up, the German investors were hesitating to invest in pharmaceutical industry in this country. After all these discussions which have taken place and in which you wonderfully participated, may I ask you whether the hesitation is more imaginary..

Dr. J. M. Hunck: I am sure that there will be a fair and decent patent law afterwards, fair without these various causes which are lowering the investment climate; for instance, the clause which makes it retrospective on the patents already given; this is an exceptional case.

Shri Sham Lal Saraf: You have heard from different quarters that medicines and drugs sold here in this country, particularly those that are imported or supplied by foreign inventors, are priced very high. When the Bill under discussion comes into force and along with the administrative action, it will be necessary to regulate and not to control the price structure. Do you agree to that?

Dr. J. M. Hunck: Yes.

Dr. C. B. Singh: We have been told about people having put good amount of money and good amount of money being spent on research in various countries. I would like you to tell me

how many nobel laureates have been there in the last few years who have obtained nobel prizes during the last few years on medicine? Have you any such idea?

Dr. J. M. Hunck: I remember my neighbour professor Domagh.

Dr. C. B. Singh: In the last 15 years there have been 13 nobel laureates. Only one of them has been working in the drug research factory. Only one. Out of them only one has been working in a factory and that is Paul Muller, discoverer of insect-killing elements of D.D.T. He was working in a chemical factory producing pharmaceutical drugs. Others had been working in other universities or Government laboratories. The argument that money is required for research by the private firms falls to the ground completely. Research of the type that is known as research has not been carried out.

Dr. J. M. Hunck: They are chosen by other people. Many of these are not known to the general public.

Dr. C. B. Singh: Those who are selected for the nobel prize—the world knows them. I suppose you will not dispute that. There are many Germans who have obtained nobel prizes. Let me go to my next point. What percentage of the profit should be compulsorily detected for research work in any big manufacturing concern? What percentage should be detected from their income? Do you suggest any figure?

Dr. J. M. Hunck: I can give you the figure of 15 per cent., 15 per cent of the total prize.

Dr. C. B. Singh: Regarding earmarking for research work, 6 per cent is done in this country.

Dr. J. M. Hunck: I have no idea.

Dr. C. B. Singh: Hardly any research work worthwhile in what you call medicines or drug research of

drug manufacture has been done in this country.

Dr. J. M. Hunck: I know...

Dr. C. B. Singh: What is the reason for this?

Dr. J. M. Hunck: In 1957 or 1958 there were certain joint ventures in this country.

Dr. C. B. Singh: They have not produced any result. There have been various patents of foreign countries which have been sold here. Real research is not done by joint ventures also. They are bringing their raw material, bottling them, and they are doing nothing more.

Dr. J. M. Hunck: They try to use indigenous plant. They try to do it under Indian climate and other conditions. They are constantly on Indian surroundings here.

Dr. C. B. Singh: That we understand—that is not my point.

Dr. J. M. Hunck: They are sending scientists to Germany and other countries.

Dr. C. B. Singh: On page 2, on paragraph 4, you have said that there is nothing wrong with foreign investments and that West Germany has made use of them from the very beginning. We are not disproving that. We don't dispute. What we dispute is the amount of investment and the consequent income and profit they take. Suppose we ask you to suggest reasonable ratio of income from the investment, will you suggest something? Sometimes you get 20. Sometimes you get 30. Sometimes you get 40. What do you suggest?

Dr. J. M. Hunck: It should have some relation to cost.

Dr. C. B. Singh: Will you agree to 40 per cent?

Dr. J. M. Hunck: Annual profit of 40 per cent?

Dr. C. B. Singh: They say and put it as high as that.

Dr. J. M. Hunck: It should not be so much.

Dr. C. B. Singh: How can you bring this down? There are very heavy prices as compared to the investment. What do you suggest to bring this down?

Dr. J. M. Hunck: Profits have to be set in relation to costs.

Dr. C. B. Singh: You have mentioned that as far as price is concerned, there should be some discount for hospitals, etc. Can this be done and brought about in this Bill, compulsory discount for this very thing, in this Bill?

Dr. J. M. Hunck: Latin America for instance. They offer a huge discount.

Dr. C. B. Singh: They do it here also. 20 per cent they do even here. That is not enough.

Dr. J. M. Hunck: When you say something apart from price regulation, you must mention its cost . . .

Dr. C. B. Singh: You agree to this to be incorporated in this bill.

Dr. J. M. Hunck: Yes.

Shri D. P. Karmarkar: The principal difficulty is in respect of foreign collaboration. That has been found. There are certain well-placed firms and producers abroad who are collaborators here that maintain the patent. During the duration of the patent as no importation can be made in competition with the sale by the patentee the charges charged by the patent-holder are inordinately high. You mentioned one instance. I am mentioning this because we have a combination of two manufacturers. The reference is to Merck Sarabhai. They are very famous in this field. In respect of Vitamin C their sale price within the country is Rs. 74/-

per kg. The international price is Rs. 18.50/- subject to minor variations. This firm is a first class producer, but the internal consumer has to pay four times the cost of international price for the same product. There is a strong feeling on this.

Dr. J. M. Hunck: Could you kindly give the details of this case?

Shri D. P. Karmarkar: The details are what I said, Vitamin C is being manufactured with German collaboration of a very high standing. The Indian manufacturer is also of high standing. The internal price of the product is four times the external price. I am not asking you to comment on this. If these facts are correct, would you leave some discretion to the public authority to see to it that nothing more than what is considered as a reasonable price is charged for the product?

Dr. J. M. Hunck: In any case, of course, I have mentioned it several times.

Shri D. P. Karmarkar: For this purpose it will be good for the competent authority to take power and to take such measures to make the selling of the products at a very high price almost difficult and impossible. A little increase in price on account of first production or due to local conditions is admissible. But if the difference in prices is so much, then you would agree with me?

Dr. J. M. Hunck: I completely agree. I have mentioned it in my memorandum. Normally the comparison should be with international standard price, but subject to special costs in India.

Shri D. P. Karmarkar: You have made your position clear in regard to 40 and 42. One may or may not agree with that. That is a different matter. You have given reasons also. I have checked up the factual position in

Germany. This is a United Nations publication. I think we can take for granted the facts contained in this publication. There I may just invite your attention to one provision, namely: "If working is of public interest, compulsory licence, and possible revocation; revocation by Federal Patent Court two years after grant of compulsory licence is possible. If the invention is exclusively or mainly...' Let us leave it. I am now coming to the most relevant point which says: "Free use of the invention by order of Governments". Government have reserved this right to themselves. "Free use of the invention by order of Government in the interest of public welfare or security". Public security is clear. If Government are satisfied that the public welfare is so served, then free use of the invention is permissible. Do you agree with this?

Dr. J. M. Hunck: What about compensation then?

Shri D. P. Karmarkar: Let us assume that compensation is there.

Dr. J. M. Hunck: With compensation I agree.

Shri D. P. Karmarkar: So you agree that at any time in the interest of public welfare free use of invention can be made.

Dr. J. M. Hunck: Of course

Shri D. P. Karmarkar: Free use and compensation do not tally.

Dr. J. M. Hunck: What is free? It is liberal use.

Shri D. P. Karmarkar: With this provision you will agree?

Dr. J. M. Hunck: Of course.

Shri D. P. Karmarkar: Cost to the consumer is part of public interest or public welfare. That is obvious.

Dr. J. M. Hunck: What is that?

Shri D. P. Karmarkar: I am manufacturing a medicine. It costs 50 times more here. Obviously public interest is involved in this.

Dr. J. M. Hunck: Then you should say that all consumer prices are for public welfare. How will you fix the price?

Shri D. P. Karmarkar: Price should be reasonable. Would you consider consumer's price as part of public welfare?

Dr. J. M. Hunck: Not in general.

Mr. Chairman: We have authentic information that international prices are lower than the prices that are being charged for patented medicines.

Shri D. P. Karmarkar: I am grateful to you for your observation. He is a distinguished person in the field. I shall pass on this information to you so that you can make use of it. You see that Vitamin B6 manufactured by Merck Sarabhai is sold here at Rs. 800 a kg; its international price is Rs. 206/-. Vitamin B12 manufactured by Merck Sharp & Dohme is sold here at Rs. 215/- a gm; its international price is Rs. 32/- per gm.

Mr. Chairman: Is Merck an American firm or German?

Dr. J. M. Hunck: Merck is American. It was taken away after the first World War.

Shri D. P. Karmarkar: Chloramphenicol manufactured by Parke Davis is sold at Rs. 410/- a kg in India whereas it is sold at Rs. 100/- in international market. Tolbutamide manufactured by Hoechst is sold in India at Rs. 75/- a kg; its international price is Rs. 20/-. Vitamin A (dry powder) manufactured by Glaxo is

sold in India at Rs. 421/- a kg; its international price is Rs. 54/- a kg. Procaine Hydrochloride manufactured again by Hoechst is sold in India at Rs. 21/- per 500 gm; its international price is Rs. 8/- per 500 gm. Tetracycline Hydrochloride manufactured by Pfizer—you please note this—is sold internally at Rs. 1,147/- per kilo; in the world market it is sold at Rs. 107/- per kilo. Assuming that these facts are correct, then you have already agreed that Government should take some power in their hands.

Mr. Chairman: They are correct. They are compiled by the Reserve Bank of India.

Dr. J. M. Hunck: There is the question of compulsory licence.

Shri D. P. Karmarkar: In the model law they have agreed that the Minister of Industries concerned should have the power to give a compulsory licence wherever public safety or public welfare is involved. Here we say that compulsory licence should be given. Do you agree that such power should include importation?

Dr. J. M. Hunck: Of course.

Shri M. L. Jadhav: Instead of going to the High Court, if there is a tribunal consisting of a Judge, will you be satisfied?

Dr. J. M. Hunck: Then it should be a special tribunal. The special tribunal should consist of experts. They have to be experts. I am in favour of appeal to the Court. We are living in a democratic society. There should be right of appeal.

Shri P. K. Kumaran: My honourable friend just now quoted to you the prices of different drugs obtaining in India and that obtaining abroad. What in your opinion India should do to bring down the prices of those drugs?

Dr. J. M. Hunck: Of course you will have differences in prices. This happens not only in this country but also

In many other countries. For reasons of scarcity of foreign exchange, you may not be importing the required quantity of some drugs. If you have more imports, then the prices will automatically go down.

Shri P. K. Kumaran: It is not a question of foreign exchange. We can import only those medicines for which the firm has taken a patent in India. If for a particular drug a firm in Germany has taken the patent in India, we cannot import that drug from any other source.

Dr. J. M. Hunck: Cannot you import from any other source?

Shri P. K. Kumaran: They have taken the patent for the drug as well as for the process.

Dr. J. M. Hunck: That comes to the suggestion I made before. The price of the imported drugs should, of course, be controlled. That shall be controlled by the Commission I have suggested.

Shri P. K. Kumaran: Some time back the Government of India issued a licence to a German firm for the manufacture of raw chemicals and intermediate chemicals in large quantity in India. For some reasons that German firm has refused to build the factory. Unfortunately, I don't know the name of the German firm.

Dr. J. M. Hunck: Sometimes there are such cases.

Shri P. K. Kumaran: This firm was to produce 94600 tons of raw chemicals and 33,200 tons of intermediate chemicals from which drugs were to be made. Now the German firm has refused to build it.

Dr. J. M. Hunck: I am sorry I could not tell you the reasons. I don't know the name of the firm.

Shri Dalpat Singh: You have mentioned in your memorandum that international partnership was an efficient help on the way to the recovering of

the West German Industry which was completely shattered in 1945. May I know how far this can be attributed to the Patent Law operative in your country?

Dr. J. M. Hunck: With international co-operation the economic development of a country will go faster. If you have a patent law according to international standards and on international basis, naturally the international co-operation will be forthcoming. For the same reasons the Soviet Union agrees to the patent laws of various countries and sticks to them. This is a base for smooth international economic co-operation. Patent law is the pillar of international co-operation.

Shri Dalpat Singh: What is the percentage of appeals to the Federal Court from the Patent Commissioner in Germany? I want to know whether the number of appeals is small or it is a good number.

Dr. J. M. Hunck: It is relatively a small number. During the last 15 years it is 34 out of 3,000.

Shri R. P. Sinha: Dr. Hunck, you have spoken very flattering words about our democracy and about our democratic functioning. You have quoted copiously from our leaders both in the Government and outside the Government. You have also stated that the Patent Law of our country has been largely patterned on your own patent bill in Germany. There may be variation in some details, but the main frame-work is more or less same. You have also stated that the Government there function judiciously not only in the interest of German public but also in the interests of industries there so that they can also function profitably. I don't know why, when you have got so much confidence in our Government and in our way of functioning, you fear that we will not implement this law fairly, in spite of the fact that there are reserve powers.

Mr. Chairman: I don't think that would be justified.

Shri R. P. Sinha: He has stated in his memorandum that with the passage of this Bill there will not be inflow of capital and the knowhow and the patent in this country, although it is a similar legislation and he has confidence that our Government would function fairly, and will not see that the patent rights are abrogated in spite of the fact that we have reserve powers.

Dr. J. M. Hunck: After seeing the working of this Committee, the sincere efforts you are really putting to find out the different shades of opinion about this Bill and the democratic way in which you are functioning, I have no doubt that the outcome will be a fair patent law. That your patent law is framed after our patents law is itself flattering to us in Germany. I don't see why we should object to it.

Shri R. P. Sinha: You have stated that HOECHST are selling 76 per cent of their product—pharmaceutical products in Italy and only 24 per cent comes out of indigenous source because their products are so good. Why should they fear that they will not be able to do well in this country even if we have no patent law?

Dr. J. M. Hunck: In Italy, they have no big German firms but they have been getting drugs etc. from the neighbouring countries. Practically there is a large pharmaceutical industry in the neighbouring country and it serves well. Likewise, in Great Britain, whether there is any Patent Law or no Patent Law, we try to export our products there. Here, in this country, the difference is that this is a new market. We try to make good work. In the case of Italy, it is served by the neighbouring countries. We must concentrate all our efforts on good work.

Shri R. P. Sinha: As far as I think, in India, we know that the German manufacturers do very well. I don't think that there is any difficulty with

regard to your country. Whether there is any Patent Law or no Patent Law, the name is there; they will be able to sell all their products.

Dr. J. M. Hunck: It is in your interest that these German firms do make their investments in India on laboratories. You should encourage this in order to have production.

Shri R. P. Sinha: That is what we are trying to do exactly. We are encouraging that in order to have production. That is the purpose for which this Committee is sitting to revise the Patent Law in such a way that we have production here.

Dr. J. M. Hunck: Then it is good.

Shri R. P. Sinha: My hon. friend here has referred to you about the different prices obtaining in India and in the international markets for the different products including some of the German products.

Here, I would like to know whether it is possible for you to give us the cost of production of the German pharmaceutical firms in India as well as in Germany to find out why the prices here are so high. Is it a fact that the cost of a drug is high because the cost of production here is high or is it because they are trying to profiteer from the nearest market that the cost is high?

Dr. J. M. Hunck: I think this refers to several items which we have to consider. For example here we have to pay higher freight charges, customs and excise duties.

Shri R. P. Sinha: We would like to go into details. Do you feel that the prices here are unreasonable being four times the international prices?

Dr. J. M. Hunck: Now it may be unreasonable. But, in the long run, it will be reasonable.

Shri R. P. Sinha: Will it be possible for you to cooperate with this Committee to furnish us with a certain data to show as to what is the cost of

production in India and in the international markets else-where?

Dr. J. M. Hunck: I shall try to do that.

Shri Peter Alvares: The phrase 'cost of production' is rather a misnomer. The prices in India are not so high because there is no production here. All that is happening here is that in each item a lot of ingredients is involved.

Shri R. P. Sinha: I am only talking about the items which are manufactured here.

Shri Sham Lal Saraf: Very little is manufactured here.

Dr. M. M. S. Siddhu: You have quoted about the cost of research in the pharmaceutical industry. May I quote it that the Medicinal Chemistry by Burger a standard book; here, he says that out of 500 to 1,000 compounds, if you screen all the compounds qualitatively, that cost alone comes to \$ 2 to 4 lakhs. At the same time, if one were to take one year's profit of a patented drug and a non-patented drug—in England they call it as branded and non-branded drug—on one item alone, the difference is to the tune of two lakhs and sixty pounds. In other words, the sale of a single drug for one year is able to cover out of the profits all the services and other expenditure which have gone into the research. But it said in the country that the research is a very expensive thing and its cost has to be recovered over a very long period. This is something which I cannot understand. Therefore, will it be possible for you to tell us why in the name of research, the increase in prices of a drug is out of proportion with the expenditure?

Dr. J. M. Hunck: Do you want me to tell you about the expenses on a single drug?

Dr. M. M. S. Siddhu: What I want you to tell me is this. Out of 3,000 compounds, what will be the actual

expenditure that will be incurred on one compound? If that compound is successful in one country alone, will the profit from that compound cover the cost of the whole project? Will that also not cover up the expenditure on research incurred within one year?

Here is the figure that I have got. I am quoting it from the U. K. Public Accounts Committee's Report. The name of the product is 'Pamedol'. This is one of the German Firm's product. Price difference in one country is £ 2.60 lakhs. Worldwide patent would be able to recover out of its profits all expenses incurred on research in a short time.

Dr. J. M. Hunck: I might mention that in some cases the research costs will be covered within one year but in other cases, it might take a number of years.

Dr. M. M. S. Siddhu: There is a drug by name sulphanoria of CIBA. They have been able to cover up their expenses out of the profits of this drug; there is another drug by name Tolbutomide. Here also they have been able to cover all their expenses. In England, it is found that from the sale proceeds of one year, the difference between branded and non-branded drugs total investment on research could be met. The profit on one year's sale is equal to the total research done on a product of that firm in England.

Dr. J. M. Hunck: Of course, it is equal to the total research done on a product of a firm in England.

Dr. M. M. S. Siddhu: If the drug is to be sold all over the markets within six or seven years, the total expenses on research are recovered and yet most of the drug manufacturers, as Dr. Singh said, are not doing the fundamental research work. They are thinking in terms of more compounds branching out of a particular compound; comparison with the parent compound makes a difference of

5-10%. That is why in the long run these compounds or drugs become obsolete as you have said yourself. The drug industry in order to produce more and more of such drugs are spending money and producing obsolete drugs. Because of this real research, as Dr. Singh has said, is still coming out of the Universities, Research Institutes where the understanding of the disease processes is going on whereas the question of marketing of drugs of doubtful value which are not going to last long is being done by the modern drug industry.

Dr. J. M. Hunck: I would not be quite off the mark when I say that I know that many big German pharmaceutical firms like Bayers have had enormous research work done to assist the general development of new products. The very reason that these new drugs will become obsolete very soon itself is an additional impetus to invent new processes to have new drugs invented. It is not that only from the business point of view but at least as much from the scientific point of view also that a man who invents some thing, and invests it for the general good too.

Dr. M. M. S. Siddhu: The German manufacturers and their products have been held in high esteem not only during the last few years but for many years—we can even think of the twenties. Since then the question of collaboration should have come up earlier. I would like you to tell us how much is research done through the Universities and institutes and the drug manufacturers. While they were importing these drugs and making good deal of profits, they were drawing all the profits from out of our country.

Mr. Chairman: Do you want to know the contribution to research in Germany?

Dr. M. M. S. Siddhu: I want to know the financial contribution in India, to the Universities or to the Indian Medical Research Council of

India. The drug industries' contribution towards research has been negligible.

Dr. J. M. Hunck: I do not know. How could I know? I have been told by my German friends of a pharmaceutical branch that it costs more money to make their products popular. You talk of India. For instance in Germany there are many magazines for doctors etc. and they are explained in those magazines whereas in this country there are only few, I have been told and so a man has to cover regularly the various physicians.

Dr. M. M. S. Siddhu: It is not that we do not have enough of medical magazines and journals which will reach medical men. But when the firm have more formulations which are in competition with each other, they detail their representatives to go out with a lot of samples and all that. There what the firms do is to ask the doctor to prescribe 'A' medicine or 'B' medicine of a particular drug manufacturer. It is not due to the fact that the mailing is bad in India or the magazines are not there. It is only for doing more and more promotional work and there the expenditure is about 20% as compared to 6% on research, the average all over the world.

In your country it has been pointed out in the United Nations booklet that the medicines are not patentable, the drug is not patentable but the process is. What happens is this: the firm which is going for a process or for a product tries to cover all the conceivable theoretical ways of reaching that product with the result that to reach that product or to manufacture the product all the theoretically possible ways have been blocked. The result is that another young scientist in spite of the fact that he is able to discover or manufacture or bring out the same drug by another process finds that theoretically he is blocked. Will you like that the process to be patented should be the one or two which the particular patentee has in view to

exploit rather than all the theoretical possibilities? Patentee should get only those processes patented which he is likely to exploit but not all the theoretical processes which can be conceived in Chemistry.

Dr. J. M. Hunck: I would agree with you.

Shri P. C. Borooah: You said that you have no objection to Government retaining the right of revoking a patent at any time provided compensation was paid. What is your view if suppose a patentee abuses his right? Do you want that he should also be compensated?

Dr. J. M. Hunck: He should be stopped immediately. He should not be allowed to earn any further profits out of his patent. But I would like to know what you mean by 'abuse'.

Shri P. C. Borooah: Suppose he has taken a patent for 15 items but he is working only two items and import the rest. Is it not an abuse?

Shri D. P. Karmarkar: If I may supplement, the hon'ble member's question is; suppose a patentee comes here; he purports to manufacture some items. So he gets the exclusive right of importing the same. He goes on importing them and selling them and making profits and shows no ostensible progress in its manufacture within the country. That is what he calls by 'abuse'.

Shri P. C. Borooah: There also you want compensation to be paid?

Shri D. P. Karmarkar: For 3 years he has done nothing. The patentee's intention is not to work out the patent. In the mean time for 3 years he has had the advantage of importing the product and selling it here, with no corresponding advantage to the people at all. In this situation, why should he be paid compensation; why should we not penalise him and mulct him some of his profits?

Dr. J. M. Hunck: I would put these things in a contract that penalty will be imposed, etc. Then it will be binding if he abuses. It will have a judicial basis.

Shri P. C. Borooah: In 1911 it was considered reasonable that a period of 16 years would do for a patent. Since then the country has developed technologically to an unimaginable content. Why ignore this position? Why should not the period be curtailed because of this technical development, which it has been possible to do research and marketing in a much shorter period. Why should you ignore this technological development and cannot reduce the period to 16 years or 14 years?

Dr. J. M. Hunck: I am not quite sure whether research can be done in a faster way. I would say with the advance of science, the outcome of things is more complicated; you invent for a disease which has not been known before and you don't know the outcome; these can take much more time.

Shri Bade: In your memorandum, on page 3, you have said that this patent Bill is bad both for foreign and Indian investors. The object of the Bill is to encourage Indian investors, according to the statement of the Bill. Then how can you say that it is bad for Indian investors?

Dr. J. M. Hunck: Where have I said so?

Shri Bade: On page 3 of your memorandum, you say "The Patents Bill which is now introduced in the Parliament tends to perpetuate the emergency law which, as the expression says, is only meant for times of emergency. This would be bad for both foreign and Indian investors."

Dr. J. M. Hunck: Because you can't perpetuate the emergency situation which is only for a certain period and you can't normalise these conditions of emergency . . .

Mr. Chairman: Because foreign investors will not come . . .

Shri Bade: If the foreign investors could not come in, my another question is that the Patents Law should not allow excessive foreign influence in the economic field and it should also protect the country's balance of payments position. Is it not true?

Mr. Chairman: That is for us to decide.

Shri Bade: If he does not agree with me, then is it not a fact also that in India 90 per cent of the medicines are foreign and they are importing all the drugs here? Then there is this question of foreign exchange. Therefore, this Bill is introduced. Do you not agree with us?

Dr. J. M. Hunck: I agree with you that as many patents as possible should be produced as soon as possible within the country.

Shri Bade: If this Patents Law is abrogated, then there will be more firms importing, there will be competition and the consumers will get the products at a cheaper cost and there will be more inventions in India; just as is done in Japan.

Dr. J. M. Hunck: I am not in favour of abrogating the Patents Law . . .

Mr. Chairman: It is for this Committee to recommend. He has given his opinion.

Shri Bade: Then there is another question about this royalty. You have said that some compensation should be given. But there are so many countries—Japan, Jordan, Kuwait, Liberia, Mexico, Netherlands, New Zealand, U. K., etc.—where there is no provision for compensation. Even then the companies are having their sales there.

Mr. Chairman: He has given his views. It is for this Committee to consider. He wants compensation.

Shri Vimalkumar M. Chordia: Some of the firms have got patents for many
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drugs but manufacture only a few and import others. We want that they should manufacture all here and not import. What procedure will you suggest for that.

Dr. J. M. Hunck: This question has already been put by another Hon'ble Member—about what procedure should be followed to induce these firms to produce here.

Shri Vimalkumar M. Chordia: For example, Hoechst is holding many patents in India but exploit only one, that is for manufacture of Tolbutamide. What should we do to induce these firms to manufacture other drugs also here.

Dr. J. M. Hunck: You can only persuade the firm to manufacture in India if there is a market which takes enough of its production. I am of the opinion that if there is any chance to produce here with profit, then it will be done.

Shri Vimalkumar M. Chordia: Indian market is almost monopolised by foreign patentees and foreign collaborators. Can you suggest any way so that India can be relieved of the dependence on foreign companies?

Mr. Chairman: It is for us to take decisions.

Dr. J. M. Hunck: Sir, three months ago I had a long conversation with Mr. S. L. Kirloskar. I asked him why Indian products were not sold at world market prices in Germany. He said that Indian economy was associated with a closed market for many years and most of the products were sold in India itself. But the international market is a buyers' market where the buyers decide the prices. I think it is a general outcome of a situation of market which is in India for the last 35 years or so.

Shri D. P. Karmarkar: We are happy to learn that. Germany is even now having a very few of our engineering products at prices which are competitive.

Dr. J. M. Hunck: We are sending now two engineers to India to find out which parts of the machines, such as sewing machines etc. can be produced to advantage India and sold in Germany. We have the Business Bureau in Dusseldorf, sponsored by the manufacturers' or anisation, and they are considering this question; they find that the quality etc. can improve in the course of two years, but it would take some time. They always concentrate on two or three qualities which are still in vogue in Germany. In the case of one of the items, about ten years ago, there were 150 varieties, but today there are only five left, and more and more of it is imported from other countries.

So far as the Import quota system is concerned, I am in favour of letting go all these quotas. But I might say that most of these quotas are not even practically used by the Indian exporters to the full today, but when you ask them they only tell you that because of the quota system they are not able to export more.

Shri Vimalkumar M. Chordia: The patent law will apply to all types of industries, but we are seeing that only the pharmaceutical industry is agitating very much against this. Can you attribute any reasons for that?

Dr. J. M. Hunck: You are discriminating against pharmaceutical firms, and there must be a reason for it. And I quite understand it. Your Health Minister has explained it several times that the health and physical status of the whole nation depends on meeting the demands for vitamin tablets, vaccines, medicine for preventing malaria and so on. So, the pharmaceutical industry has a certain distinct and vital position in respect of the life of the nation.

Shri R. Ramanathan Chettiar: May I know how many combines or cartels are there in West Germany in the pharmaceutical industry, such as Bayers etc.?

Dr. J. M. Hunck: Bayers is not a cartel. We have an anti-cartel law

in Germany under which cartels are prohibited.

Shri R. Ramanathan Chettiar: You do not have a law such as what exists in the USA?

Dr. J. M. Hunck: We have an anti-cartel law. We have a special cartel tribunal in Berlin. Whenever any case comes up that tribunal goes into the matter. So far as Bayers are concerned, they are an independent firm, and they are not a cartel.

Shri R. Ramanathan Chettiar: While thanking you for having taken the trouble to appear before this committee, I would suggest that it would be advisable for the representatives of your pharmaceutical industry not only in West Germany but in the Central European countries to come and appear before us, because now they have sent you, only a non-technical man on their behalf. That is the only humble suggestion that I have to make to you.

Dr. J. M. Hunck: I am very sorry. I was not sent for this purpose. I told them that I would be going to India but it would be difficult for me to represent them, but they said 'Since you are going to India, why don't you appear before the Committee on our behalf?', and I said 'All right'.

Shri R. Ramanathan Chettiar: It would be helpful to the pharmaceutical industry as well as to the Joint Committee if they could send some of their representatives to appear as witnesses before us.

Dr. J. M. Hunck: Dr. Jucker is coming. He represents the Swiss industry where a similar situation prevails.

Shri B. K. Das: Have you studied the patent law, that is the Patents Act, 1911 as it is in existence now?

Dr. J. M. Hunck: I have studied it broadly, because I intended to refer only to the basic economic facts and not to go into details.

Shri B. K. Das: Do you think that that law as it stands today will be helpful for having foreign capital and for lowering down the prices and for fostering the development of the industry?

Dr. J. M. Hunck: It will be helpful. Of course, some changes or some amendments can be made.

Shri B. K. Das: But you do not want amendments to the extent that the present Bill envisages?

Dr. J. M. Hunck: Giving retrospective effect to certain provisions is a bad thing. Further, the basis of calculation for royalty and other expenses is not quite clear. Then, there is the question of appeal to a special court. I understand that you are going over that provision again. I would suggest that there might be a special court where the person can go in appeal. These are the few suggestions that I would like to make.

Shri D. P. Karmarkar: By special court, you mean somebody with judicial experience?

Dr. J. M. Hunck: Yes, of course, so.

Shri D. P. Karmarkar: It may be a regular civil court or it may be a court appointed by Government but it should be a court manned by persons with judicial experience?

Dr. J. M. Hunck: Yes, it should be manned by persons having judicial experience.

Mr. Chairman: Thank you very much.

Shri D. P. Karmarkar: We deeply appreciate the trouble that you have taken to come and give evidence before us.

Dr. J. M. Hunck: I thank you very much for this opportunity given to me.

(The witness then withdrew)
[The Joint Committee then adjourned]

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1965

Thursday, the 3rd February, 1966 at 14.00 hours

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Dinen Bhattacharya.
7. Sardar Daljit Singh.
8. Shri Basanta Kumar Das.
9. Shri V. B. Gandhi.
10. Shri H. K. V. Gowdh.
11. Shri Kashi Ram Gupta.
12. Shri Madhavrao Laxmanrao Jadhav.
13. Shri Braj Behari Mehrotra.
14. Shrimati Sharda Mukerjee.
15. Shri P. S. Naskar.
16. Shri Chhotubhai M. Patel.
17. Shri Naval Prabhakar.
18. Shri R. Ramanathan Chettiar.
19. Shri Sham Lal Saraf.
20. Dr. C. B. Singh.
21. Dr. L. M. Singhvi.
22. Shri K. K. Warior.
23. Shri Ram Sewak Yadav.

Rajya Sabha

24. Shri Arjun Arora.
25. Shri Vimalkumar M. Chordia.
26. Shri D. P. Karmarkar.
27. Shri P. K. Kumaran.
28. Shri Shyamnandan Mishra.
29. Shri Mulka Govinda Reddy.
30. Dr. M. M. S. Siddhu.
31. Shri Dalpat Singh.
32. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

Dr. E. Jucker, *Incharge of Synthetic Research, Sandoz Ltd., Basle (Switzerland).*

Dr. E. Jucker, Incharge of Synthetic Research, Sandoz Ltd., Basle (Switzerland)

(The witness was called in and he took his seat)

Mr. Chairman: Before we begin, I have to bring one matter to your notice. You have given a Press statement in India. Normally the proceedings of this Committee, until they are placed on the Table of the Houses of Parliament, are treated as confidential. So it was most improper on your part to have given a statement to the Press.

Shri R. Ramanathan Chettiar: He held a Press Conference.

Mr. Chairman: It should not have been done. You are appearing as a witness before this Committee. Till the report is placed on the Table of the Houses of Parliament, the proceedings of this Committee are treated as confidential. Whatever evidence you will give here will be treated as public and it will be printed and placed on the Table of the House and will also be distributed among the Members of Parliament. Even if you want any portion of it to be treated as confidential, it will be printed and distributed to the Members of Parliament.

We have received your Memorandum and copies have been distributed to all the members of this Committee.

If you want to supplement anything to that, you can. Then members will ask questions.

Dr. E. Jucker: Hon. Mr. Chairman and Hon. Members of the Joint Committee.

I should like, first of all, to thank you very much for having given me an opportunity to appear as a witness at this meeting of the Joint Committee on Patents Bill. Being a research chemist, being a Swiss citizen, I am very much impressed by the democratic principles of your country, of your Parliament and of this Joint Committee. I will take this experience back with me and I thank you very much once again for the opportunity that you have given me to be here as a witness.

I should like to apologize for not having a full command over English and I should also like to apologize, Mr. Chairman, for what has appeared in the Press and if you permit me, I would like to give a few explanations as to how it had happened.

I have been in India five times, always invited to lecture on drug research, and each time I was asked

by the Press to discuss the most recent achievement in drug research with the Press and each time there were small articles in the Indian papers on the subject of my lectures. Therefore, I was not surprised to be asked this time also to tell the Press as to what was going on in drug research. With respect to the lecture I had to give yesterday at the Royal Society of Chemistry which was presided over by Dr. Seshadri....

Shri R. Ramanathan Chettiar: We are not referring to that.

Dr. E. Jucker: I supposed that the Press-men wanted, as usual, to ask questions with respect to that lecture and I was taken by surprise when they started talking of patents. A few things were published. I sincerely apologize for that; I did not intend to do so. I hope you can accept this.

With your permission, Mr. Chairman I would like to say a few words in addition to what I have stated in the Memorandum that I have submitted.

May I, first of all, draw your attention to the fact that I am only a research chemist. I graduated myself in Organic Chemistry from the University of Zurich where I spent six years with the famous Nobel Prize Winner, Prof. Karrer. I then joined the research laboratory of Sandoz and there I am in charge of synthetic drug research. What I know about patents—I must admit quite frankly—is only as a research chemist and not as a specialist on patents.

I should like to draw the attention of the hon. members of this Committee to the fact that drug research, as it is done today, is done in an entirely different way when compared to what was done perhaps 30 years ago. In those days it was possible for a single research worker to isolate natural products to establish their physiological properties, to have those natural products tested by clinicians and then to see that some of these natural pro-

ducts were used as medicines. Today the situation is a completely different one. Drug research of today is a very complex enterprise. I certainly do not want to make any propaganda for Swiss watches, but I want to point out that the mechanism of drug research can best be compared with the working of a Swiss watch. There are many many wheels which have to turn at the same speed and in the same direction together and only the whole of it is to be considered as drug research. The situation has also changed very much inasmuch as natural products in modern drug research, apart from antibiotics, do not play the same important role as they did 20 or 30 years ago. Drug research of today consists mainly of synthetic work and most of the medicines which we use today are of synthetic origin. I would like, later on, to go into greater details as to how this drug research functions and how long does it take, because it does have a direct relation to the patent systems of various countries.

I have already mentioned that drug research consists of many varied sciences. I should like to give you a proper idea of its functioning according to the chart which was distributed to you. In the development of a new pharmaceutical speciality, many sciences are involved today. The begin of a research project is always an idea. We, synthetic chemists, are used to think in terms of relationship between chemical structure of compounds and their possible physiological activities. Once, such an idea has been conceived, it must be transformed into a working hypothesis and here a very complex and complicated work starts. As a research chemist, I then have to establish the already existing knowledge with respect to my own idea. I must be absolutely sure that what I want to start is new and novel. Otherwise it would mean duplication of work and I could not afford to start it. Therefore, the beginning, after the working hypothesis has been established, is always a very thorough

search of literature and of patents. I mention patent in this connection for the following reasons.

In the patents which can be bought at the patent office, chemical procedures are described and it is said to what final products these chemical procedures would lead. It must also be said in each patent as to what purpose the final products are meant for. Therefore, what is contained in a patent has the same value as a scientific publication. The knowledge of what is published in a patent can under circumstances form the basis from which a new research line can be started. We must consider the literature and patents before we start the research project of our own. Let us assume that this research has shown us that the idea is new and we are persuaded that it is a good idea and we hope that new medicines might result. The first experimental step then is chemical work. The chemist who is usually graduated from university, starts synthesising new compounds. He builds a complicated compound by adding small compounds together and by subjecting them to chemical reactions. Synthetic research, as it is today, is a very complicated procedure and requires thousands of basic chemicals as starting materials. Pharmaceutical industry is not a basic industry. It requires basic materials from other sources. During the synthesis, out of the simpler parts, a complicated product is being built. It is like a house. You have the bricks. You add them together and at the end of it, it is a house. In the same way it works in the synthesis. Usually to start a new project about a dozen of novel substances are required; we consider them as prototypes. Then these substances undergo a thorough pharmacological screening, the purpose of which is to establish the physiological activities of the compounds which we have synthesised. These compounds are new; they were not known up to now, and it is not possible to predict their physiological properties. Those of our colleagues who are pharmacologists, apply these new substances to isolated tissues from

animals and later on to the whole animals such as mice, rats or others and see how these substances react and what effects they produce. Sometimes there are good effects. Sometimes there are no effects; and sometimes there are undesirable effects.

Let us assume that the compounds we have built from simple substances produce certain interesting effects in animals. Let us also assume that due to certain activities of these substances a certain percentage of mice fall asleep then it could be considered as a sign of a sedative activity of the substance we were testing. Our next duty is, now to supply many more substances to pharmacologists in order to find out whether the substance produced hitherto is the most active one, the best that is wanted, or whether from the new group there are better substances to be had. It usually requires the synthesis of many hundreds of new chemical substances in order to establish these relationships between the structure of the novel substances and their pharmacological activity. This work takes 2 years, 3 years, or more in the chemical laboratory. Parallel with it, other substances are tested in what you find here as pharmacological screening. This pharmacological screening takes at least as long as the chemical work. Of course, some of the screening is done simultaneously with chemical work. Let us assume that this pharmacological screening has shown that a few of the substances possess interesting properties, and we think that these properties can be used in the treatment of human beings: as sedatives or tranquiliser or whatever it is. These few substances, perhaps six or a dozen out of 500, or out of one thousand, must undergo a very detailed pharmacological screening. Many tests are applied to the substances and together with these new pharmacological screening a very extensive research with respect to toxicology must be done. It is an extremely important factor as you all know of

course, and we must be very careful to have no substances in all these tests and in the tests of human beings which might be toxic. These toxicological tests require half year or one year and only afterwards are we allowed by Government's regulations and by our own conscience to pass on one or two substances into clinics where medical doctors would test them on the patients. Usually it is the chemist who produces the substance itself and the pharmacologist who tests the substance. Usually these people also try the new products out on themselves, in order to be sure that no accidents could happen in the clinic.

Parallel with the clinical tests many other tests should be carried out. Analytical work must be done, in order to be absolutely sure that substances are pure and quality is always the same. This is a very important thing. Lot of effort is spent on the analysis of these new potential drugs. At the same time biochemistry of the substance must also be studied in order to find out what happens to the substance in the human body.

Let us assume that all these tests proceed on well and our clinicians are prepared to look at the substance on human beings. Sufficient amount of the new product must then be produced. And, this is an entirely new task which cannot be carried out by research chemist, but for which special laboratories exist. We call them 'Pilot Plants' because they have fitted their work with quantities of 5 kilos or 10 kilos whereas in the research laboratory, you work with one gramme or five grammes or 10 grammes, but certainly not more.

Therefore, before the substance can go into the clinic, the pilot plant must synthesise 5 or 10 kilos which again requires a certain amount of time, half year, or sometimes longer, if the procedure is a very complicated one. Later on it is upto the physician to tell us whether the substance is good or no good at all. If it is no good at all,

we try to produce something better. If it is good, the clinical test goes on for two years, three years or longer and the clinical tests are carried out on thousands of patients. Let us assume that we have been lucky—luck is always required in our field—and one of the substances survives and the physicians say that it could be used. Then, of course, we will start thinking of manufacture. First it will be hundreds of kgs, sometimes even thousands of kgs. At the same time, we must start preparations to inform the medical profession of the new substance. Very often, we are criticised today that our factories spend lots of money on the medical propaganda. I would like to explain here—probably you all know it—that it is not only propaganda that we are doing in this respect, but it is something more. You can never expect the medical profession to be able to make use of a novel substance if we do not explain what the new substance is, how it works whether it is less or more toxic, what are the side effects, where it could be applied and how it could be applied. This is a very difficult job. This is not to be considered as a pure propaganda. It is absolutely needed in this field. All in all, the whole procedure takes on an average six, seven or eight years or even more. From my own experience I can tell you that most of my own medicines which were developed by my collaborators took us seven, eight or more years. When we compare our own results with the results obtained by others, it is all the same and it could even be longer.

Due to the time factor, I should like merely to draw your attention to a very important blood-pressure drug—Alpha Mthyl Dopa. It was synthesized in 1950, but was introduced into therapy only in 1963. It took thirteen years to evaluate this drug in such a way that it could be introduced into therapy.

After this explanation, I would like to answer the question. Where is drug research done today? You have

seen from what I have said up-till now that in order to carry out drug research you need learned people who can study patents and literature. You need chemists, you need physico-chemists, analytical chemists, bio-chemists, physiological chemists, pharmacologists, biologists, micro-biologists, toxicologists and clinicians. You need representatives of about one dozen different sciences. It is so all over the world, with few exceptions. It is only the pharmaceutical industry which can combine all those people together. They must be almost in the same building. They must have daily contacts. They must work hand-in-hand. Drug research is carried out in industrial laboratories in this way. Few drugs result from other sources.

Mr Chairman, I may, with your permission, make one more remark about the contributions of drug research to the welfare of human beings. Yesterday I gave a lecture entitled: Progress in drug research. I spoke on four subjects—High blood pressure, Diuretics, Oral Antidiabetics, and Mental Drugs.

Fifteen years ago not one single drug for the treatment of mental disorders was known. Twelve years ago not one single drug for the treatment of high blood pressure was known. Ten years ago not one drug for oral administration was known to combat sugar diabetes. The last twenty years have seen a tremendous output in this field of entirely new medicines. These medicines have revolutionised our means for therapy. It is true to say that millions of human lives have been saved by new drugs. I can draw your attention to perhaps the case of mental disorders. Ten or twelve years ago mental cases could not be treated properly with drugs. There were only electro-shocks and insuline shocks, but no drug therapy was possible. Many of you who have seen mental hospitals know what they looked like. People were just put away and isola-

ted from humanity. Medical doctors where not in a position to treat them properly. These were the poorest of the poor. Today what is the position? I have seen many mental hospitals myself. There are no patients left in the rubber cell. Most of the patients can live quite ordinary lives with the help of drugs. Many patients have been released from hospitals and are working-patients who otherwise would have spent the rest of their days in the mental hospitals. I am very happy to say that one of our substances has produced such interesting effects in mental disorder cases that patients who have been hospitalised for more than twenty years could be sent him for the first time and remain at home. Of course, many of you know these things yourselves.

Mr Chairman, ladies and gentlemen, I would not like to keep your attention any longer. I can only say that according to my humble opinion and the opinion of research chemists, patent is an absolute necessity for research of any kind and patent is a necessity for drug research for various reasons. There are very few fields in research activities where competition is as tough as it is in pharmaceutical field. Therefore, I am of the opinion that the better the protection the patentee is given for pharmaceutical research, the better will be the output of new substances. I do not want to go into details in this respect. I would be very happy to answer all questions if there are any to be put forward. I will try to answer them to the very best of my knowledge. Thank you very much for your attention.

Dr. C. B. Singh: Dr. Jucker, we are grateful to you for describing the method of drug research as it happens today. We are very happy about it. I would like to draw your attention to one important point. Here, I have got a paper showing the names of Noble Laureates who have been doing research work on medicine and physiology. Out of 30, only one Noble Laureate, Mr. Paul Mueller, is working with the industry in Basle,

Switzerland. All others have been working either in the University Laboratories or institutions which have nothing to do with what you call pharmaceutical drugs. That is an important point you have to remember. Secondly, you have given in paragraph 4 on page 7 of your memorandum the important new drugs produced by the various countries in the last 15 years. USA 355; Switzerland 44; West Germany 32; U.K. 27; France 21. You also mention that majority of this work was done, rather, was helped by drug manufacturers. I want you to substantiate your point that majority of this research was helped by the drug manufacturers.

Dr. E. Jucker: First of all, you asked how does it come about that Nobel Prize Winners are not with the industry but with the Universities. I have not seen the list of these Nobel Prize Winners which you have and I would like to look at it, before I with the industry and quite a lot of experience with respect to how Nobel Prize is given. I would put it this way. Quite a few of the Nobel Prize Winners, who are probably in this list, were very much supported by the industry. Chemical Professors, who have received Nobel Prize recently had a very close association with the industry and quite a lot of fundamental research has been carried out by them. In this respect, we must differentiate, of course, basic research and the applied research. The purpose of the latter is new drugs. The work of pharmaceutical industry must be based on basic research and it has been established this way that in the Universities people do more of a basic research than in the drug industry. Basic research means that you don't aim at something absolutely special which could as such be used in the therapy. Basic research means that you study fundamental functions of the body; or for example, fundamental chemical reactions. Those who have achieved some outstanding result in their basic research have won this Noble Prize. If I as a research chemist contribute

a new drug for mental disorders, such a contribution would never fit into the regulations of the Noble Prize Committee. If something of importance to the humanity is being done at a particular, level of basic research, than it is rewarded by the Noble Prize Committee. Such people are seldom with the industry.

Dr. C. B. Singh: Your explanation is there. But the fact remains that real basic research of a fundamental nature anywhere is carried out by these Noble Laureates and the drug companies, if anything, take those ideas and modify those things to suit their own purposes. That point you concede.

Dr. E. Jucker: As much as I am aware, not one single drug has resulted from the work which was done by a Noble Prize Winner.

Shri P. S. Naskar: What about penicillin?

Dr. C. B. Singh: We shall take the question if penicillin as pointed out by the Deputy Minister. In 1928 it was discovered by Flemming and in 1939 Florey was one who discovered the practical use of it. Then there is Chain. How do you say that no one has discovered any drug? Penicillin was not discovered by the research worker in the industry.

Dr. E. Jucker: Drugs are not produced by Noble Prize Winner—it is a fact. Penicillin is one of the very very few exceptions, if it is not the only one. Drugs are not produced by this very important type of people; fundamental knowledge is produced by them. But pharmaceutical industry does not just modify it. Fundamental knowledge is needed, but what is built on top of it is quite enormous. Some of the research work of Chain was paid by the industry.

Dr. C. B. Singh: You will agree with me that, in spite of the researches carried out—sulpha drug you have brought out as an anti-biotic—penicillin still remains the queen of anti-biotics.

Dr. E. Jucker: May I tell you that the first achievement in the fight of infectious diseases was due to Professor Domagk who was associated with the German pharmaceutical industry and who discovered the anti-bacterial effect of the red dye prontosil. Sulpha drug have saved many lives and are extremely important bacticides.

Dr. C. B. Singh: I have used it and in the earlier stages because of its toxic effect some of the patients died.

Dr. E. Jucker: It was not synthesized for the purpose of using as a drug in the initial stages. It was a general observation that Prof. Domagk made that it has anti-bacterial activity. Two years later, it was substituted by sulfanilamide and released as a safer drug. With sulfanilamide probably no people died.

Dr. C. B. Singh: I lost so many patients because of using Prontosil. I have seen patients dying. In your memorandum you have stated that the USA is the largest in producing new drugs. How do you explain it? Why all those drugs have been centralised in America? Have you got any explanations for that?

Dr. E. Jucker: I would put it this way. America's pharmaceutical industry is an extremely developed one. They have very big pharmaceutical firms and they have been spending enormous sums of money on research alone. Last year, more than 300 million dollars were spent by the pharmaceutical companies—not by Government—on industrial drug research. 300 million dollars were spent for this purpose in one year alone. Due to concentration of research workers and also due to all facilities which can be got by spending all this money, it is quite clear that the efforts which are made produce many new substances. If all these substances are tested properly, it is quite clear that more drugs result from them than from a smaller amount of substances.

Mr. Chairman: What is the amount expended by U.S.A. Government on this?

Dr. E. Jucker: I do not know that. But, last year, 300 million dollars had been spent by the private enterprises.

Dr. C. B. Singh: My second question is this. How do you explain that in this country or any other country for that matter, hardly any research worthwhile has been carried out by the institutes or by the technical institutions including the research factories of the pharmaceutical industry? Here no research worth the name has been done in this country. How do you explain that?

Dr. E. Jucker: I would like to explain on the following lines. First of all, I am sorry to say that I am not in complete agreement with his statement.

Dr. C. B. Singh: I would like you to give me one example in this country.

Dr. E. Jucker: I have been in this country five times and I have visited university laboratories as also the Central Drug Research Institute in Lucknow where quite a lot of research works are carried out.

Dr. C. B. Singh: I know much about that. Don't tell me about C.D.R.I.

Dr. E. Jucker: I would like to tell you that the Hindustan Anti-biotics have done very much of research.

Dr. C. B. Singh: This is a Government factory. It has not done research.

Dr. E. Jucker: They do research work on the same line as anyone does. In this country, certainly research is carried out; it has started bearing fruits. I know of private enterprises in the western countries

which are interested in getting new drugs developed by Hindustan Antibiotics. Here I would like to explain one thing, in a different way. In Europe Chemical industry was established in the middle of 19th century. It took the industry a long time to develop its research. You know for research work a lot of financial assistance is necessary. Nobody can afford to do research work unless one builds up financial basis first. This is probably the reason why smaller companies carry out little research, as long as they do not have a proper fundament for it.

As I have already said drug research is not a basic research; it needs intermediaries and it needs starting materials. If you do not supply all these starting materials, you cannot carry out drug research.

Therefore, Sir, in this country, drug research can be carried out either by the Government or by a private enterprise, but only if these starting materials and intermediates are made available. For this purpose a chemical industry must be built up. As long as there is no basic chemical industry, we cannot do drug research properly.

Dr. C. B. Singh: But you have forgotten one important point. For any research, you must have a first-class scientist. To get a scientist it must be made attractive for him to go into research. Can you tell me as to, why in my country, first-class men are not coming over here for research? Or for that matter why they are not coming forward for research of any kind anywhere in this country?

I have got some ideas on this. But, I want you to tell me the reason why first-class scientists are not coming to do research work.

Mr. Chairman: What answer can he give to this?

Dr. E. Jucker: Mr. Chairman, as a Swiss boy do you want me to give an explanation for certain things which are happening in this country? I cannot answer this question.

Dr. C. B. Singh: All right. Will you please refer to page 7 of your Memorandum? Here you have mentioned as follows:—

“In those countries in which most new drugs were produced, the universities conducting basic research are also subsidised very heavily by the relevant industries themselves—in this case, by the pharmaceutical industry.” I would like you to tell me as to how the subsidies are given to the universities by these industries?

Dr. E. Jucker: You want to know about the position in Switzerland or in this country?

Dr. C. B. Singh: Any country about which you know you may tell me.

Dr. E. Jucker: About this country, I do not know. But, as regards my country, the following is the position. Basic research is mainly carried out in universities. This type of research is not supposed to have immediate influence on drug research. Basic research will supply the industrial drug research with impulses and will stimulate it, but will as such not result in new drugs. Therefore, if a university professor suggests an interesting project, for example with respect to novel chemical reactions, the industry might agree to support this project even if no direct results which could be used by drug research are to be expected. Upon preliminary discussions we might come to an agreement with respect to the above project and the financial assistance which then is given, is usually meant to cover the costs for substances and personal assistance. The means which are provided by the industry usually cover these expenditures.

Dr. C. B. Singh: You know that in the earlier days there was some en-

quiry about mercury and chlorine. There used to be medicines from out of arsenic chlorine content. I am talking about the earliest period of time. Don't you agree with me that for this purpose one basic unit should be started for doing this work? It may not be difficult to do that. Take the case of sulfonamide. First this was made. Then came sulphadiazine, then came sulphadine etc., etc. That the beginning was sulfonamide itself is an important point. Later on, the synthesis was made under the same constitution, in the same cost and probably in the same circumstances and you were able to synthesise a dozen or more drugs without much difficulty.

Dr. E. Jucker: I would like to answer this question in the following way. Nothing is difficult once you know the answer, but if you work on any new synthesis, as I do often, then you are faced every day with the most difficult problems. Once you have solved them, everything looks very easy. Then there will be no problem anymore. I can tell you one example. We have recently built up a new group of psychotropic substances which could be used against mental depression. It took us 2 years to synthesise one single substance. But to produce it on a longer scale it took 3 more years. I would say that there are substances, the synthesis of which is easy and simple but the longer our activities go on, the more complicated this work does become.

Dr. C. B. Singh: You have seen our Patents Bill. I would like you to tell me a few basic features which you think should be either dropped or modified or redrafted.

Dr. E. Jucker: I feel—I am to some extent entitled to speak on drug research but I am definitely not entitled to go into details of the Patents Bill—I would, therefore, like to draw your attention only to very few points which I know, and which I have come across in my own work. May I start with the problem?

Mr. Chairman: The hon'ble Member wants to know how this Bill that is before our Parliament comes in the way of research.

Dr. E. Jucker: I would put it this way. It comes in the way of synthetic drug research, inasmuch as (a) the protection given for the substances which we develop is not enough; the process alone does not give you proper protection. Secondly, the term of patents should be longer. I am absolutely convinced and I talk the truth when I said that on the average it takes you 7 or 8 years to produce a marketable drug. If the term is 10 years, then the effective term that remains is 2-3 years and not longer. These are very important points which affect drug research.

Then, of course, there are other provisions which are foreseen in the Bill and, in the present form, such as licences of right which are unknown in any other country. There is no one single law in the whole world which have licences of right of this type, and I believe that these particular clauses will affect the developing of drug research in the country very badly. May I draw your attention to this point? How can you imagine anybody to take up costly time-consuming drug research if he knows that once he has succeeded in producing a very valuable substance, anybody who asks for a compulsory licence must be given. If according to the Bill the Controller of the Patents Office has to grant anybody who asks for it, the compulsory licence, and the royalty is not more than 4 per cent. Nobody who has ever done drug research would dare to continue under such circumstances, because he must be afraid that once after he spent enormous amount of money and after he reached certain success, the fruits of his work are taken away from him and the insufficient compensation will not enable him to continue his research.

Mr. Chairman: Do you know that in Switzerland, your country, inven-

tions contrary to law, inventions contrary to morality, chemical substances, medicines, foods when they are not made of chemical substances, processes for the manufacture of medicines other than chemical, are not patentable?

Dr. E. Jucker: That is not correct. May I give you an explanation on this point?

Mr. Chairman: What I am reading is a United Nations Booklet.

Dr. E. Jucker: There are three types of patent protection. One type is the French Law; one the American Patent Law and the other the German Law for the French and the American systems the substances as such are protected. This is not done in Germany or in Switzerland. In Switzerland the substances are protected not as such, but when produced according to a special process, which is covered by the patent. This means here for that the substances are not protected if there is not a particular process for their manufacture. What we protect is the substance when manufactured along a certain route. We have a perfect protection and there are no infringement cases in Switzerland; no infringement cases in Germany. We have exactly the same patent law and I beg you to believe it.

Dr. C. B. Singh: You think there is no provision so far for extension in our Bill. After hearing you, if there is a provision included in the Bill for extension in suitable cases, do you think that it will meet your point?

Dr. E. Jucker: Definitely, Sir.

Shri Sham Lal Saraf: I thank you for giving us some details of this modern way of research, particularly, in drugs and pharmaceuticals. May I know in the first instance whether the Sandoz India Ltd. have got collaboration with Sandoz Ltd., Switzerland or it is an off-shoot of the Swiss company?

Dr. E. Jucker: It is an affiliated company which was founded 15 or 20 years ago by our company in India. Now Sandoz Ltd. India have shareholders all over India.

Shri Sham Lal Saraf: I had the privilege of visiting your Headquarters also and talking to the Minister of Foreign Trade of Switzerland and your representative in Berne in 1960 and later Sandoz became interested in the State I come from, i.e. Jammu & Kashmir. I understand that your company is interested in both herbal drugs as well as synthetic drugs. May I know as far as your efforts or as far as your work that you are conducting within this country is concerned, whether you confine your activities mainly to herbal drugs or synthetic drugs as well?

Dr. E. Jucker: In our company, the main line of production and the main line of research until very recently was with natural drugs. This line started with ergot alkaloids and later on with cardiac glycosides. In the old days we have preferred the natural products to synthetic ones. Our company has always been very much interested in drugs from natural sources. We conceive them of the greatest importance, though the experience of the last, let us say 10 years, shows rather clearly that the main sources—I exclude anti-biotics—of drugs are synthetic sources. If you have a look at modern medicines, you will not find one single new medicine of greater importance from a natural source, which was discovered and introduced into therapy during the last ten years. The last important one was Reserpin from the Indian plant Rauowalfia Serpentina. Since its discovery natural drugs of importance were not found any more. That is probably one of the reasons why we entered the synthetic field and we started to build up substances which are not of natural origin, which are derived from the chemists fantasv. Of course, to a great extent we keep the idea of natural products as a model and we look at the formula of the natural products and try to modify it in our minds so that there is a certain relation to it. Sometimes it does work; sometimes it does not. That is what I call model based synthesis. We have natural product models but to-

day I have to say free synthesis is much more frequent.

Shri Sham Lal Saraf: Some of the learned witnesses who have preceded you, have given us the impression that if to-day the pharmaceutical industry in this country suffers, one of the main reasons for it is the paucity of raw materials for the manufacture of drugs. From your experience that your company has gained in this country, do you consider that even to-day there is a lot of scope for herbs to be raised, handled properly and brought under proper research?

Dr. E. Jucker: I have been asked this question about each time I was in this country. I have discussed these problems with my friends from universities, from other institutes and also from the industry. I believe—this is my personal opinion; I have an experience of 20 years in drug research—that the greatest handicap you face in your country is the lack of raw materials for synthetic drugs. If you want to produce synthetic drugs on a large scale, you need a well-established chemical industry for basic starting materials. If you have to import all the raw materials—the simple chemicals—from abroad, then the whole enterprise of the synthesis of medicines becomes very costly. In order to produce one kilo of a medicine, you might require 100 kilos or even 1,000 kilos of a simple starting material like benzyl chloride or chloroacetic acid, because the yield during a complicated synthesis is so small that you start with a huge amount and at the end of the synthesis, there might be a kilo or two. This explains the cost of the substance. And if you have to import all the raw materials and pay transport charges for such huge quantities, it would be too expensive. Therefore, I would like to say that if synthetic drugs are to be produced here, the raw materials, the starting materials, must be made available by your own industry. Of course, there are also possibilities with herbs. But these herbs have been

investigated so thoroughly during the last 40 or 50 years that, I think, very few herbs remain uninvestigated, that is, herbs which you can collect in major quantities. Therefore, I believe that if you want to build up a drug industry of your own producing these substances, you should better start with synthesis.

Shri Sham Lal Saraf: May I know, ever since you started manufacturing drugs and pharmaceuticals in this country, how many imported inventions you have got patented in this country, and secondly, how many of these patented drugs are actually being manufactured by you in this country?

Dr. E. Jucker: This question is very easy to answer. Out of all the products which we have on the market here, there is only one drug which is under patent protection. It is Intestopan, used for intestine trouble. All the rest of our products are not under patent protection. It might be that a second product is also under patent protection, but I am not quite sure about it. But in no case there are three patented products. All the rest of our products are not protected by patents. I would like to draw your attention to Calcium preparations, ergot alkaloids and cardiac glycosides—they are not protected by patents.

Shri Sham Lal Saraf: How many processes for manufacturing these drugs are done here? Is it only packing or finishing alone?

Dr. E. Jucker: No. As soon as there was a possibility to manufacture, we have started manufacturing. But, as I have already told you, if you want to manufacture a medicine, you need raw materials and we also, like other firms, had to wait until raw materials were available. We are manufacturing now our Calcium (Sandoz). The whole supply of the country is manufactured here in a place near

Bombay. These manufacturing facilities are now being expanded in order to export Calcium (Sandoz) from India. It is now intended to export Calcium (Sandoz) produced here into Switzerland. Then they are manufacturing now cardiac glycosides. The plant digitalis is cultivated in the country and is used for the manufacture of distalis glycosides. We have started manufacturing Intestopan. I can tell you frankly that it is almost impossible to synthesise this very simple substance here because of the lack of starting materials. Therefore, we do our very best.

Shri Sham Lal Saraf: You said that even now it takes seven to eight years for fundamental research for some of the drugs. Now, on that we have different opinions. May I know from your vast experience, what would be, in your opinion, the reasonable time for a patent from the date of sealing?

Dr. E. Jucker: The average term of the patents all over the world is about 17 years. We believe that if the present term of 16 years is maintained, it is a fair treatment to the patentee.

Shri Sham Lal Saraf: In the Bill, it is suggested that from the date of sealing, it should continue for 10 years. Keeping in view all the processes that it has undergone—sometimes very lengthy processes also—if the drug is patented for a ten-year period, what would be your reaction to that, as compared to 16 or 17 years?

Mr. Chairman: He has said if it is 16 years, it is quite all right.

Dr. E. Jucker: If the patent is for ten years, then the actual protection is for two or three years and no more.

Shri Sham Lal Saraf: Drugs are sold at very high prices in India when compared to other countries in the world. Also in this country because of the rising standard of living, drugs are very much in demand. How would, in your opinion, we be able to reduce the prices

and also be able to import as much of know-how as possible?

Dr. E. Jucker: With respect to the hon. Member's question, I do not think that I am competent to express my opinion on it, because I do not know the prices of this country.

Shri Sham Lal Saraf: What about the import of know-how? How can we do it?

Dr. E. Jucker: The import of know-how depends on the collaboration between those who have the know-how and those who want it. If this collaboration can be established on terms which suit both parties, there should be no problem, and if I may say so, during the last ten or twelve years, this collaboration has worked beautifully. The pharmaceutical industry in India today is much larger than what it used to be about ten years ago; it is about ten times larger today than what it was ten years ago. This collaboration did work, and if one can proceed along the same lines, then there is no difficulty.

Mr. Chairman: This witness has spoken only on research, and therefore I would suggest that the questions also should be only on research. He is a technical witness.

Shri Kashi Ram Gupta: Your memorandum deals with the detailed processes through which a compound has to pass before it becomes useful in the final stage. You have given an idea of the average time taken in these different processes and also indicated the fact that huge sums are involved in the venture. But you have not given any picture of the break-up on the financial side of the matter. After all, there is a process on which the companies big or small have to decide; they decide what percentage of their total assets can be allotted to research for capital investment and what percentage of the profits are to be reserved for research expenses. Unless an idea of this break-up is given, your whole explanation and arguments and phraseology for protecting patents leads us to no conclusion and gives us no help

logy for protecting patents leads us to no conclusion and gives us no help in formulating our correct opinion. Please throw some light on this aspect of the problem.

Dr. E. Jucker: I thank you very much for this question; I am concerned with drugs, as I have already specified, and I work as a research chemist. I am supplied with all the money, and I spend millions per year on synthetic drug research, but I would definitely not be in a position to give you the proportion between the money we spend on drug research and the profits. The definition of the term 'profits' is not the same everywhere. The conditions here are different from ours. What I can tell you is with respect to Swiss companies; there the proportion between the money spent on drug research and the turnover is on an average about 8 to 10 per cent. My company, let us assume has a turnover of 500 million Swiss francs on pharmaceuticals; then the spending on drug research would be about 40 million Swiss francs; it is roughly about 8 per cent.

Shri Kashi Ram Gupta: Your memorandum leads one to conclude that the pharmaceutical industry in the future can deliver the goods only if it is highly centralised both in regard to capital and know-how, productive capacity and marketing, and competition too can only be possible when equally giant firms are there in the market. This means that the older the company, the more are its chances to stand in the market. Such companies possess such varieties of medicines also along with the patented medicines, whose patents time-limit has elapsed but which are in good demand in the market. They are thus in a position to get results by spending on research a lower percentage of their profits than those who are new to the line. Thus having such a law as protects such combines naturally goes against the interests of *entrepreneurs* in undeveloped countries and those whose resources do not match with those of the developed countries. As such, a legislation of

your conception which you have just now referred to will naturally go against the interests of our economy. If your reply is in the negative please explain how you can substantiate that it will be in our country's interests.

Mr. Chairman: The hon. Member's questions are too long.

Shri Kashi Ram Gupta: I have written it down purposely so that I do not go astray this way or that way from the main point.

Dr. E. Jucker: I am very happy about this question. I have many very good friends in this country. Despite the fact that I am associated with a private firm, I do not keep what I know as a secret; I lecture about it and then try to give my advice if it is wanted, where I can. I have discussed this particular question many times here with my colleagues at the universities and with my friends, and therefore, I would like to put it this way.

Enterprises which can produce drugs, either governmental or private enterprises, have not been built within five years or within ten years. Many of these enterprises are fifty years old. Some of them are a hundred years old. Thus, the whole procedure requires time. You need time to build up a factory and to build up research work, and you cannot forget about the time-factor; you cannot get round it. You cannot expect your country which is industrially a young country to produce drugs as cheaply and at the same quantity as a country which has been doing so for hundred years. It will need a certain amount of time, but the fundament for manufacturing your own drugs cheaper perhaps than what they are today is research work. If research work is carried out in this country, proper drug research, then you will be able to produce drugs of your own. If drug research is carried out abroad, patented abroad and then you get compulsory licences, then you will always be later than the foreign countries, and your country would always be depending upon them. I

believe that a country like India should aim at independence at all the levels. And independence in medicines can be achieved only on the basis of drug research of your own, and, that is where I am a firm believer in the fact that if you stimulate drug research in this country, drug research done by Indians, by Indian firms and eventually helped by Government, and you have a patent system which protects the results of those researches, then you will have a proper drug research and drugs of your own. That is the way I see it.

Shri Kashi Ram Gupta: Seeing your reply, I think I have to put my question this way now. Pharmaceutical research goes hand in hand with research in the field of diseases and ailments also. The latter research mostly constitutes a duty on Governmental level or is done by such organisations as may be specified. So far as the pharmaceutical drugs are concerned, do you not think that if the risky processes are covered by Government aid or by Government organisations, then the rest of the process which has eliminated this risk can be taken up by private enterprise? If such a thing is done, then how could you say that the present patent law would not give enough term for the patent? If that is done by governmental agency mostly, then the fear of risk is eliminated; then so far as the term, royalty and other things are concerned, the present Bill should suffice, I think. What is your opinion about it?

Dr. E. Jucker: I hope you do not mind if I do not completely agree with your opinion. I have been born in Russia; I have lived there for 14 years, and I have relatives in Russia, and friends in Russia and friends in my own business in drug research. Russia up till now has not produced anything of importance in the field of drugs. If you go through the list of Russian drugs, that is the drugs which are available in Russia—I have the latest book by Prof. Mashkovsky whom I know very well—you will find that they are all drugs which have been de-

veloped in Western countries. Here, you have an example. The whole drug research is started and paid for by Government. I believe that if you let the pharmaceutical industry compete, one firm with another, on the basis of free enterprise but protected by a proper patent law, then you will get better and quicker results than by governmental aid.

Shri Kashi Ram Gupta: I think my question is not very clear to you. My point is this. I have suggested that the risk portion of it may be covered by Government but the other portion could be left to private enterprise. That is not so in Russia.

Dr. E. Jucker: But what is the risky portion of it? The whole is risky. I have projects; I must admit that I might be not too good a chemist; I have worked on rheumatism project for more than ten years, with about 6 Ph.D. chemists and about 40 assistants; we spend perhaps 20 million Swiss francs on it. The results are non-existent. What is the portion which is risky and which is not risky? The whole is risky.

Mr. Chairman: How can you divide the two?

Dr. E. Jucker: You cannot divide it.

Shri Kashi Ram Gupta: At page 10 of your memorandum you have mentioned that the development of drugs has slowed down during the last five years. This in your opinion is due to legislative measures, keen competition and high expenses etc. Do you mean that the Governments of all countries or of some particular advanced countries have introduced such legislative measures during the last five years?

Dr. E. Jucker: I would like to explain it this way. First of all, the developments in the sciences which have led to new drugs—I have described all of them—such as chemistry, pharmacology etc. have been tremend-

ous, and many new drugs were discovered. There are many new drugs available, and the more of them are available, the more difficult it is to find new drugs and to find better drugs. That is one reason why this process of finding new drugs has slowed down.

The second reason is that drug research becomes more difficult as we enter into new fields. Take, for instance, the virus diseases, cancer etc. We know so little about the fundamentals of these fields; that needs much more basic research; so, much more basic research must be done on them. For example, as long as we do not know what is rheumatism or what is cancer, how are we to produce new drugs? That is what I would call basic research. If somebody discovers what cancer is he will not get the remedy but the Nobel Prize because it is only on this discovery that we can produce the remedy, but the discovery is very important. Therefore, I would say that in fields which remain open and which are so difficult we are spending, all of us, enormous amounts of money. For example, take cancer research. We are rather certain that during the next ten or twenty years there will be no drug of choice for cancer, and yet we are spending money on it because we want to do the progress. If we do not, then who does? That is one answer to your question.

Shri Kashi Ram Gupta: But you have not replied to my question about legislation in the countries.

Dr. E. Jucker: I am coming to that. The second part of your question is this. There was a very unhappy experience in Germany and in other countries about five or six years ago. For the first time in the history of drug research, it was found that a certain substance when used by pregnant women had resulted in fatalities and that had caused a tremendous drawback on the whole drug research. Everybody is now afraid of

unknown factors in novel substances. If you have something novel in your hands, then it first means that you do not know everything about it. Therefore, we ourselves have become much more careful about introducing new drugs, because no one can afford a second case like that such as we faced five years ago in Germany and other countries.

Shri Kashi Ram Gupta: Do you agree that these regulations of the Government are justified?

Dr. E. Jucker: Absolutely so.

Shri Kashi Ram Gupta: How do you say that this Bill puts hurdles in the way?

Dr. E. Jucker: I do not object to it, but I say that it takes much longer today to find a new drug and to introduce it in the market. Therefore, it becomes much more costly, and the period which is left for the patent is too short. That was the point that I wanted to explain.

Shri D. P. Karmarkar: Are you able to appreciate the fact that there is petty little invention here, and what we have been doing during the last ten or fifteen years is with collaboration with distinguished firms like yours and it is by this means that they have been having some industrial production in the field of pharmaceuticals here, with proper terms etc. Therefore, the motivation behind the shortening of the period in respect of patents from 16 to 10 years is this that we are anxious to have industrial production started here as early as possible. Are you not in a position to appreciate that this is the reason for the shortening of the period?

Dr. E. Jucker: I fully understand the idea, behind this shortening of the term. I fully understand it and I fully appreciate the Indian position. But we must not forget that patent does not give everything. Anyhow, it is not in the

patent that one gets the know-how; it is not in books that one gets the know-how; this know-how must also be made available if somebody wants to utilise what has been described by a patent. Just by shortening the term of a patent one does not find a suitable solution to this problem. I think it would be wiser if conditions could be made such that the patentee willingly gives all that he knows, the whole know-how plus the patent to the licensee; I think that that would be very efficient if it were done that way.

Shri D. P. Karmarkar: Do you agree that for reputed producers of drugs and medicines like your concern, for instance, in the world of pharmaceutical production, whether you have a patent or not does not make a difference? So long as the industry produces things of good quality, and your concern produces things of good standard, and Sandoz will remain Sandoz, whether or not you will have patents would make no difference.

Dr. E. Jucker: With respect to patents and drugs, for our company or for any other company, the following has to be said. We have tried to find out how many drugs out of those sold in India are patented and we have come to the answer that it is only 2.5 per cent; 97.5 per cent of all the drugs in this country are not patented at all; they can be manufactured by anybody in this country. And yet why do people not do it? They do not do it because they lack the know-how; they lack the facilities. This is much more important. But with respect to patents, I still have got to stress the following. This 97.5 per cent covers all the products, so to say. The new drugs which are developed by the industry and which are put on the market require patent protection for a few years. If after a few years this patent protection stops and drugs become free, then the industry does not mind. But to introduce a new pharmaceutical speciality, there must be protection for a while. Just imagine what will happen, if a firm introdu-

ces a speciality and gives all the information to the medical profession. Imitators get everything gratis. They would not contribute anything at all. As soon as such a firm puts the product on the market, there are perhaps 20 similar products produced by imitators from all over the world. Then the profit which the patentee must have for a while becomes questionable. That is a very important point. The starting of a new drug must be covered by a patent.

Shri D. P. Karmarkar: It is not as a complaint that I am mentioning this. In so far as your distinguished concern in India is concerned, for instance, they have specialised in belladonna alkaloids and ergot alkaloids. I am told it is a fact that they are not making these things in the country, even though the raw material is grown here. Why?

Dr. E. Jucker: I am prepared to take all the blame, if necessary I have been asked why do we sell certain products here like balladonna—alkaloids which is derived from a plant which grows in this country but, why do we import this substance from abroad? Why do we not manufacture it here itself? This question is very justified and I am very happy that I am in a position to answer it, because I had a similar request quite recently with respect to another of our drugs.

Certain products are sold in thousands of kilos and others are sold in a few kilos. Belladonna alkaloids are extremely active compounds; they are used in dosages of half a milligram or one milligram. For some of these products which my firm markets here, the basis is just not broad enough to manufacture the amount needed here; it might be perhaps one kilo or 5 kilos. It would be too costly to establish manufacturing facilities for a small amount of active ingredients and it is wiser in every respect to buy it from somewhere where it is produced on a larger scale. It will be cheaper.

Mr. Chairman: What is the quantity you are manufacturing in Switzerland?

Dr. E. Jucker: Very small. I do not exactly know, it is perhaps 50 kilos or perhaps 100 kilos. But it is never in tons. It is very little for the whole world.

Mr. Chairman: India is ten times Switzerland.

Dr. E. Jucker: This product has been on the market for a very long time. It has never been developed in significant terms.

Shri Sham Lal Saraf: In Kashmir a substantial quantity of belladonna is grown. But the difficulty today is of processing. Is this firm prepared in any way to encourage that State to process belladonna?

Mr. Chairman: Is your firm doing anything to help the processing here?

Dr. E. Jucker: Yes, I can give you an example. The amount of substance which one manufactures for a speciality must be of some order in order to justify manufacture. If it is only for a very small quantity, it is too costly to manufacture it.

Mr. Chairman: That can be said of every other product.

Dr. E. Jucker: No, Sir, here are substances which you need for a speciality in sufficient quantities and then you try to manufacture them as is the case with digitalis leaves which is grown here in the country by ourselves and extracted here.

Dr. M. M. So. Siddhu: Will you take Cortisone?

Shri D. P. Karmarkar: Let me finish my questions.

So far as vital medicines are concerned, are you in a position to ap-

preciate that they have been exploited, patents taken and part of the expenditure on research has been covered by profits, and that being so, in view of the large market that exists in India by way of its huge population, not much would be lost by the company or the producer who comes here either in collaboration or by himself, if the period of protection is reduced, so far as medicines and drugs are concerned, from 16 to 10 years?

Dr. E. Jucker: What one must realise is this: You need to synthesise about 3,000 compounds to produce one food drug. That means that this one drug is to pay for all the failures, and the profits we are making on this one drug must finance all the failures and all the research we are carrying out at the present time. We never know how long it is going to take us to produce the next medicine.

Mr. Chairman: But that is not so in the case of all drugs. There are drugs which take two years, some three years and so on.

Dr. E. Jucker: I fully agree. But as I see it, you cannot have a patent law which takes these differences into account. These drugs which are sold on a very broad scale are an exception. We have waited for years and years to bring out a new drug and then if the protection for this one new drug is two years, we are not in a position to compensate, to reimburse our expenditure.

Mr. Chairman: Will you be satisfied if in certain particular cases, the period may be extended by the Controller under powers given to him?

Dr. E. Jucker: Quite frankly, the drug research people would appreciate if there was a proper limit of let us say 15 years for all inventions, but if this cannot be done, of course, even a prolongation of the term is better than nothing.

Shri D. P. Karmarkar: There is a provision in your federal law, a summary of which has been given in the U.N. brochure as follows:

"Other cases in which patents are subject to public use—Total or partial expropriation in public interest against compensation to be fixed by the State."

Have there been any complaints about this provision in your law either by your own companies or foreign companies having patents in your country?

Dr. E. Jucker: Compulsory licences in the Swiss law, German patents law, European patent law, are of an entirely different character than what is suggested in this Patents Bill. Here everybody would be entitled to a compulsory licence with respect to patents on drugs. In our system compulsory licences are given only in the public interest and then against proper remuneration, the quantity of which is not fixed but is subject to mutual discussion. I must make it quite clear that not one single case of this type has happened in Switzerland during the last 10 or 15 years. There has not been even one single expropriation by the Government of a patent, and if it had to be, then we would accept it for three reasons: firstly because it is needed in the country's interests, secondly because a proper remuneration would exist, and thirdly because we would have access to an appeal at the highest courts of Switzerland.

Mr. Chairman: It might not have happened in Switzerland, but there are several countries which have got this provision of compulsory licensing—U.K., France, Germany, almost all the countries.

Dr. E. Jucker: Yes, but it is always in the public interest and for security purposes.

Mr. Chairman: You have no objection to that.

Dr. E. Jucker: We have no objection to it at all. This is absolutely justified.

Shri M. L. Jadhav: In the law of your country, there is a provision for revocation of patents. Has there been any instance of revocation of patents and for what reasons?

Dr. E. Jucker: In my country, not one single patent has been revoked in recent years. The provision is there, it is in every country for dealing with cases of immorality and things like that.

Shri P. K. Kumaran: After giving number of inventions in your memorandum, you have stated:

"The remaining countries including Italy and Russia produced fewer than five."

Will you enlighten us why Italy and Russia could not produce modern medicines?

Dr. E. Jucker: I was very careful in putting it down as less than five. I must admit that I know of not a single original drug produced in Italy or Russia. In fact, a couple of years ago the Russian Minister of Health complained badly about the underdeveloped state of the Russian pharmaceutical industry. In Italy very little research work has been carried out by three or four of the major firms only; all the rest of the Italian industry did nothing but copy. Therefore, the research work which was carried out in Italy was of a very limited order, and it never led to one single original pharmaceutical speciality. Nowadays the Italian pharmaceutical industry is going through very bad times. There has been recently a governmental study made of the Italian pharmaceutical industry, and it was asked why certain of the companies were being taken over by firms from abroad, why other Italian firms had started limiting their research activities, and it was answered that in the present situation when

there is no patent protection for pharmaceuticals at all, nobody in Italy can afford research work in this field, and they have never been able to carry out proper research work during the last 20 or 30 years, that is the reason why they have no new drugs of their order.

Shri Arjun Arora: You said that 97.5 per cent of medicines sold in India were unpatented. Is that figure based on turnover in terms of rupees, or items of medicine?

Dr. E. Jucker: Items of medicines or drugs sold.

Shri Arjun Arora: Have you any idea of the turnover of patent medicines in India in terms of rupees?

Dr. E. Jucker: No. It can be done, but it will take some time.

Shri Arjun Arora: Does your firm deal only in patented medicines for both patented and unpatented medicines?

Dr. E. Jucker: Yes, with both.

Shri Arjun Arora: Could you give us an idea of the percentage in terms of rupees of your turnover in India?

Dr. E. Jucker: I am sorry I could not do it. I would say a major part of the sales is with unpatented medicines.

Shri Arjun Arora: You said that in Russia there was not much research. How is it that they are able to produce medicines at cheaper rates without research?

Dr. E. Jucker: I do not know how cheap medicines are there, the only explanation that I can give is that the Russian drugs which you find in Prof. Mashkowski's books, all those drugs had been developed by the west; the west has paid the whole research expenditure for these drugs. They are just manufactured and sold in Russia. They are western medicines.

Shri Arjun Arora: Why cannot you do it in India?

Shri R. Ramanathan Chettiar: Even in Russia the open market prices are very high.

Shri K. K. Warrior: I wish to know the proportion of the cost of the starting material, the intermediate and the finished products in the Sandoz factory.

Dr. E. Jucker: I could never answer this question because I just do not know it. I am in research. I understand nothing about the costs of the starting materials or the cost of the end products. But may I give you an example which I was told a few days ago here in India. You can take a cotton shirt and find out the cost of the cotton in it and compare it with the price of the shirt. You can do the same thing in medicines and this will be about the answer. Starting materials are very cheap. But the work involved is very expensive and the yield at the end is very small. That is what makes the cost of the final product. If you add together the price of all starting materials this will never give you an answer.

Shri K. K. Warrior: What I mean is this. We get a material worth 100 dollars. How much will research cost? How much will the intermediates cost? How much will the finished product cost?

Dr. E. Jucker: We can never generalise like that. It is different in every case. If you have a starting material, sometimes it takes three operations to get the end product; sometimes it takes 15 operations. So, there is no generalisation possible.

Shri K. K. Warrior: Do the intermediates cost much more? disproportionately more?

Dr. E. Jucker: No, no. May I clarify? The price of a substance which we use as a drug is composed of various fac-

tors. One of the factors is the price of raw materials. Another factor is the work involved; yet another is the capital involved; then there is the research factor. So, there is no generalisation possible.

Shri K. K. Warior: We have a report here from Justice Ayyangar before us. In that report on page 16, he says that there are some examples where an invention is not patentable in the patentee's home country but is patented in India and they relate to patents for medicine and drugs taken out by Swiss nationals in India.

Dr. E. Jucker: May I tell you that I hold myself a couple of hundreds of Swiss patents. That is the only answer I can give you. In Switzerland we can patent our inventions in the pharmaceutical field like in the whole of Europe. There are only 7 countries in this world where you cannot patent pharmaceutical inventions — China, Afghanistan, Iraq, Iran, Ethiopia and Turkey. Italy is going to have a patent law. In the rest of the world including Switzerland you get patents for pharmaceuticals. I know the Swiss law by heart. What is of ten being mixed up is product *per se* protection which you have only in France and USA while you have in the rest of the world product by process or process protection. It is a wrong interpretation to say that in Switzerland there is no patent protection for pharmaceuticals.

Shri K. K. Warior: I could not follow.

Mr. Chairman: He says it is wrong interpretation.

Shri Daljit Singh: On page one of your memorandum you say that you do not propose to even attempt to consider the legal provisions of the Indian Patents Bill. And also in the end of the memorandum you say that the prime concern of the legislators dealing with the Patents Bill should be the encouragement of drug research by means of a strong, just

patent law which would ensure the unimpeded further development of this most important industry.

In view of that should we think that you support the Bill.

Dr. E. Jucker: Mr. Chairman, this is a very important question. Is the distinguished gentleman asking me whether I support the Bill?

Mr. Chairman: He has come as a research scientist.

Dr. E. Jucker: I wanted to say what I know about drug research and the implications with patents.

Mr. Chairman: That is what he wanted to tell us.

Shri Peter Alvares: I have one simple question. Dr. Jucker, you are a very prominent chemist. The Patents Bill, as is stated in its objects and reasons, is to encourage inventions, etc., but the controversy appears to be on the time-limit of patents. It has been suggested in the case of medicines and drugs the period should be 10 years and otherwise, it should be 14 years from the date of the patent. The date has been defined as the date of the filing of the specifications. May I know what can be the time-limit? Between the filing of the specification and the commercial exploitation of the patent, how much time should be deducted from the span of 14 years?

Dr. E. Jucker: This is a very important question. I will give my absolutely frank opinion about it. Due to very hard competition to which we are submitting in our part of the world, we have to file the applications as soon as we can. That means we file them as soon as we have the pharmacological results. We wait for the first pharmacological results which may be indicative, indicating the proper commercial use of the compound as a medicine. Therefore, from the time of conception of the idea to the time of filing, perhaps one year elapses on an average.

Shri Peter Alvares: From the time of filing of the specifications.

Dr. E. Jucker: From then on, it takes us six or seven years to market it. Out of the eight years we require for the whole research, one year can be deducted. Therefore, from the moment of filing, it is perhaps seven years.

Shri Peter Alvares: I presume you know the meaning of the words "filing of the specifications". From the time of the filing of the specification, the period of the patent is counted. Between the time of filing the specification and the marketing of the product, how many years could be deducted from the 10 years that are available?

Dr. E. Jucker: Seven years.

Dr. M. M. S. Siddhu: Great stress has been laid on the point that unless chemical engineering and chemical industries are developed in this country, research on synthetic products, synthetic drugs, is not possible at this present stage, with the result that we will be dependent on research of other countries and their patents and on large imports, thereby this country will be depleted of its large resources, and it will not be able to carry on with any major chemical programme. So, in such a case, do you think that the production of the period of 10 years is not justifiable. Please take into consideration firstly, the economic state of the country; secondly, the non-development or the infancy of the chemical industry; and thirdly, once a firm has introduced a drug, that product does not go out of the market in spite of the fact that the patent has elapsed, because the doctors, once they are accustomed to a particular brand, go on continuing to prescribe it? In other words, the ten-year period does not mean only 10 years but it means as much time as the doctor can reliably entrust the patient with the quality of the drug and as long as it lies in his memory! Therefore, under these circumstances, would the ten-year period not suffice?

Dr. E. Jucker: You have been judging the present situation on the pharmaceutical market and the present situation arose under the existing patent law where you have the protection of 16 years. First of all, nobody can predict with absolute certainty what is going to happen if the 16 years are reduced to 10 years. But do not forget that in the old times, it did not take as eight years to introduce a substance in the market; even if it took eight years to develop it, then left still another eight years ago protected marketing. And then, it is clear that doctors who get the substance are inclined to stick to it. Let us assume that this Bill becomes law and the protection is 10 years. It takes us eight years to bring a compound to the market. For two years only would the patent protection last. If a compulsory licence is given immediately, the patentee will enjoy no monopoly at all.

Dr. M. M. S. Siddhu: You are presuming that it takes seven years; light drugs such as streptomycine, chloromycetine, etc., started processing earlier, but it is worth-while studying the question in respect of the date of the application of the patent, the sealing of the patent and the manufacture of those products, and studying what is the time taken. The time in America is never more than three years.

Dr. E. Jucker: It has been studied. The cases which you talked about are instances. The antibiotics are got from the fungus and the cultivation of fungus, and needed perhaps as some what shorter time than synthetic drugs.

Dr. M. M. S. Siddhu: And steroids.

Dr. E. Jucker: How long has it taken to develop this steroid field? If you take the modern drugs—of course, chloromycetine and so on related to 10 years ago—on an average, the time taken is much more than it was 10 years ago. Today, you can take

for granted that no synthetic compound can anymore be brought into the market before six years. In this country, it takes two years to get the Government permission to market it in addition to the chemical and pharmacological and toxicological development.

Dr. M. M. S. Siddhu: I do understand it. I do not have the list at present; it was a long list of drugs which are modern in the sense that they have revolutionised the treatment. That is what they call modern in America. I had a list of about 10 drugs containing steroids, Bu azolidiss products and antibiotics and I found that from the filing of the application to the grant of the application, there was one year, and within three years they started the manufacture.

Dr. E. Jucker: It is absolutely impossible today. It might have been possible 10 years ago, but the new law will have an impact on research today and not what was happening 10 years ago. Today, it is just not possible to introduce a compound within four to five years. It cannot be done, and I can give you examples, as many as you want.

Then, I would like to give the answer to your next point. You said that once a substance is introduced by a firm, then the medical profession knows it and sticks to it. But just take this fact: you synthesise a compound and you bring it out and within the first half a year, somebody who had previously asked for a compulsory licence which must be granted according to the Bill—after half an year—also brings out your new product and 20 more imitations come; you said the medical profession would stick to your product. But, after all you were the only one to have all the expenses for the research and the copyist did not contribute anything at all.

Dr. M. M. S. Siddhu: I have before me the book Medicinal Chemistry by Burger. He has worked out the expenditure on the screening, toxicology controlled clinical studies and quality control and he says that out of every 500 to 1000 compounds which are synthesised and tested, if one were to become successful, the cost runs from 2,20,000 dollars to 430,000 dollars. This is the Second Edition of his book published in 1960.

Dr. E. Jucker: Six years have elapsed since then and inflation has gone ahead. I am sorry I have to say frankly that Prof. Burger is a very academic man. I know him personally. He is a professor at the university. He has never done drug research on his own and he never had to pay for it.

Dr. M. M. S. Siddhu: When a patentee takes out a patent for a product through a process, through his theoretical knowledge he covers all the possible processes which are likely to lead to that compound. Will it not be correct that the patent should be only of those two or three processes which the patentee is likely to exploit and not all the possible processes, otherwise research in other countries on a similar product is blocked for ever?

Dr. E. Jucker: When you talk about research, you do not quite mean the same thing as myself when I talk about research. When I talk about research, I do not want to find new ways to synthesise known compounds. But I want to find ways to synthesise new compounds, because only if you find new ones which can be used as medicines, you help the progress of medicine. Otherwise, if you find new processes for substances which have been developed by others, you help yourself and the progress of medicine is nil. Therefore, by idea is the best way to protect research is to grant product protection. This is my firm belief. Secondly, I have already pointed out the way it is handled in Switzerland and Germany—it is pro-

duct by process protection. We are not allowed to claim all possible processes. We must describe them properly and they must work. Therefore, no fantasy is allowed in these patents. If somebody finds a process which is novel and which adds to the progress he can get a patent of this own.

Dr. M. M. S. Siddhu: In Switzerland, if a particular patent is not worked, then compulsory licence is given.

Dr. E. Jucker: I cannot answer this without reading the corresponding paragraph of the Swiss law very carefully, because to my knowledge in the last 15 years not a single request for a compulsory licence has been made. So far as I am aware, you have perhaps only a summary of the law. It requires much more than non-working. Non-working, according to my knowledge, does not permit a compulsory licence in Switzerland. Otherwise, there would have been requests for it. I believe it is the relation between non-working and a dependent patent. If you have a patent which depends on another patent and this patent is not worked and you are prevented from using your patent, then after a period of 3 years you can ask for a compulsory licence.

Shri P. S. Naskar: The provision in Switzerland is:

"On request, compulsory licence may be granted by the court if the invention was not adequately worked in Switzerland within three years from the date of registration of the patent. The patent may be revoked if after the expiry of three years from the issue of an ordinary licence, the granting of licence is not sufficient to satisfy the needs of the Swiss market."

Do you contradict it?

Dr. E. Jucker: I do not contradict it. But I must see the whole law. Reading one paragraph will not do.

It is inter-related with the other provisions. Assuming it is correct....

Shri P. S. Naskar: There is no question of assumption. It is a fact I have quoted from the United Nations Publication.

Dr. E. Jucker: But still there are three years during which the patentee can decide whether he wants to utilise the patent.

Mr. Chairman: So you cannot object to a similar provision in our country?

Dr. E. Jucker: If a safeguard period is provided for, it is absolutely all right.

Dr. M. M. S. Siddhu: Why is it that medicines other than chemical products are not patentable in the Switzerland?

Dr. E. Jucker: According to the Swiss law, only chemical processes are patentable; physical processes, mechanical processes for the extraction are not patentable. The substance which you obtain as the final product must be obtained by a chemical process. Only then it is patentable.

Dr. M. M. S. Siddhu: If there is a such a provision in our Bill, will it not also protect at least a large number of antibiotics which are not synthetic?

Dr. E. Jucker: In your Bill, there is no distinction between synthetic products and natural products at all. You take pharmaceuticals as a whole class.

Dr. M. M. S. Siddhu: One has been trying to refer to development of drug industry in Soviet Russia. For instance, it will be worthwhile understanding and studying why only two countries, the United State of America and Soviet Russia, are going into space and not the other people. If one is to compare these two things, one will have to think why U.K. is

not doing it and somebody may say that it is due to the patent law in U. K. In a socialist country they can put their genius to a particular type of work and is possible that the Soviet people are working more on fundamental or basic research but they are not working on drug industry alone—for example Aviation medicine, space medicine, physiological process, genetics, DNA, RNA, and all those factors. Therefore, it is possible that Soviet medicine has neglected drug research work simply because they are more occupied with something more important.

Dr. E. Jucker: First of all, in the Soviet Union, it is a patent law which gives you protection along the lines of the German patent law. Secondly if it has been the case, as what you have said, that they are not just interested in drug research because they are kept busy with the space problem. Now they have realised that drug research is important. Recently when I was in Czechoslovakia I had occasion to discuss this with the people there and also some of my Russian friends. They are reorganising the whole drug research in Russia in order to become independent from abroad. Up to now they have been doing nothing but producing western drugs. Apparently, they find that it is insufficient and therefore they are thinking of changing the system now.

Shri Bade: I believe, Dr. Jucker, you must be knowing that there are two ways of granting patents—patent of introduction and inventor's certificate. Inventor's certificate is the one which is followed in the socialist countries. When your object, as is evident from your memorandum, is that research should be encouraged, supposing our Government purchases the inventions and gives grants to the patentees, have you any objection?

Dr. E. Jucker: In the eastern countries, in Russia and in the whole eastern bloc, as you said, there are two types of patents—one is the patent

like the German patent and the other is the 'authorship' or the inventor's certificate, as you call it. This is also a patent, but the patentee or the holder of the letter of inventorship has guaranteed to the State a licence to his invention for which the State will compensate him. This is the difference between the normal Western patent and this sort of, let us say, 'junior patents'. I know from my own experience that in Russia it is easy to obtain these certificates and more difficult to obtain patents. But in principal it would not make too much difference whether you obtained a patent or such a certificate, because each time the Russian Government wanted to take our inventions, whether it was a patent or a certificate, you would be properly remunerated.

Shri Bade: Leaving aside Russia and other countries, by studying our Bill you will find that both the systems are given in this Bill. Clause 87 deals with inventor's certificate. If Government purchases these things by giving sufficient compensation, are you satisfied that research will be encouraged in India?

Dr. E. Jucker: I think it is a better way if the patentee is given the possibility to work it. After all an invention is the patentee's baby, if you call it that way.

Shri Bade: Our difficulty is that the patentees or the manufacturers manufacture the things in foreign countries and flood our drug market. We want them to manufacture the drugs here. Therefore, we want that there should be, what you call, some restrictions on these foreign companies. Does this Bill put that kind of restriction or not?

Dr. E. Jucker: I have already said that if you want to build up the market here you have to encourage the industry and not introduce restrictions. Restrictions in no way will encourage anything. I think if you let the industry compete and they have

a free field, then due to the laws of free market you will get cheaper and cheaper things. If you put restrictions you will not succeed in doing it.

Shri Bade: You said that there should be 'patent product' by a particular process. In one memorandum we have read that if there is one process then the product will be the same. Therefore, if we patent the process, what is the use of having 'patent product' also?

Dr. E. Jucker: If you have one substance which can be used as a medicine and you patent one process to its manufacturer, then it is possible for the organic chemist to find many other ways to manufacture the same compound. Therefore, patenting one process means no protection at all.

Shri Vimalkumar M. Chordia: Is it not a fact that under the protection of patent manufacturers charge too high prices? For example, Ciba, which have a patent for the manufacture and sale of....

Mr. Chairman: Ciba people are coming and you may put your questions to them. He is only a research scientist.

Shri Vimalkumar M. Chordia: He is saying that 17 years patent should be granted. I say that they are charging very high prices. How does he justify this period of 17 years? Cibas were selling two ampules for Rs. 25 and now they are selling the same thing for Rs. 6.

Dr. E. Jucker: I think it is wrong to pick out one or two drugs out of a few hundred and to say that they are selling at a very high price and therefore we should modify the patent law. That is what the answer would be. If you take the whole market you will see that 97 per cent of the drugs are not patented. Therefore, I think we can say that the prices of these unpatented 97 per cent drugs have no relation to the existence of patents. So, there are other factors.

Shri Vimalkumar M. Chordia: India is a developing country. According to you the patents for products in developing countries should be 17 years. What will the Indian inventors do during this period?

Dr. E. Jucker: May I put it this way? First of all, it is often said that most of the Indian patents are held by foreigners. I can tell you that the same is the case in Switzerland, Canada and other countries of the world. It cannot but be that way. It is so even in the United States. Most of the American patents are held by foreigners. Most of the countries are members of the Paris Convention. Scientists do research all over the world and they take patents in various countries. There are many Swiss patents in India and Indian patents in Switzerland. So, that is no argument at all, because the Indian inventor should not copy the foreign patent but do research of his own—even if this one is based on the knowledge supplied by the foreign patent. With respect to seventeen years, I think I have gone into it earlier.

Shri R. Ramanathan Chettiar: How many large combines operate in Switzerland in the field of pharmaceuticals?

Dr. E. Jucker: The six largest firms are Roche, CIBA, Geigy, Sandoz, Wander and Sigfried. Then there is perhaps half a dozen more smaller firms.

Shri R. Ramanathan Chettiar: They function more or less as cartels.

Dr. E. Jucker: No cartels.

Shri R. Ramanathan Chettiar: In your memorandum and also in your press conference....

Dr. E. Jucker: May I say that it was not a press conference? They asked certain questions and I answered them.

Shri R. Ramanathan Chettiar: All right, we will not go into that. You object to the percentage of royalty

being 4 per cent on the ground that out of 4 per cent, 2 per cent will go by way of taxes. But, in your own country, there is no provision in your law for royalty.

Dr. E. Jucker: No other country than India has a provision like that.

Shri R. Ramanathan Chettiar: In Canada there is such a provision.

Dr. E. Jucker: In England and Canada the royalty is fixed by the Controller of Patent Office and one can go to the High Court in appeal if one feels that the amount is too small.

Shri R. Ramanathan Chettiar: How do you say that in an underdeveloped country like India the percentage of 4 per cent is unreasonable?

Dr. E. Jucker: I will try to explain my point. A patent law is enacted by a country for the protection of the patentee and for the protection of the inventor. If I say that 4 per cent is not enough, then I mean that compared with the inventor's effort and compared with the amount of money he has spent, it cannot be enough. I could not, of course, at the same time, take into consideration the national interest of India or of any country. I have to concentrate my thinking on the inventor. He is the one who spends money and in order to continue his research work, in order to continue to contribute for further progress he needs certain remuneration and this he would not get if 4 per cent is fixed because after taxes it would mean only 2 per cent which is too little to be considered proper recompense.

Shri R. Ramanathan Chettiah: I would like to refer to a survey made by the Reserve Bank of India which was published in their bulletin where in it is stated that in 1962-63 on an investment of Rs. 14 crores by foreign interests in the pharmaceutical industry they had remitted Rs. 2 crores by way of remittances and Rs. 5 crores by way of royalty from our country. So, don't think their profits are meagre as you are trying to make out.

Dr. E. Jucker: I am not trying to make out any case.

Shri R. Ramanathan Chettiar: I may just point out to you that 50 per cent of the capital they have taken out. This is a counter reply to your point that 4 per cent is not enough. Considering the stage of development of our country, some people think that even 4 per cent is too high.

Dr. E. Jucker: Looking at it from the point of view of the patentee it is very little and it is not enough to be considered just compensation.

Shri B. K. Das: Do you want the percentage of royalty to be fixed or it should be left to be settled by negotiation? If you want it to be fixed, how would you like to fix it?

Dr. E. Jucker: I think it is a very important question. First of all, I think it is wrong to fix the royalty because sometimes 4 per cent is too much and sometimes it is by far not enough. I think the royalty must be established in every case individually. First of all, it must be discussed between those who want to buy something and those who want to sell something. One invention might have cost 10 million dollars to develop and another invention only 500 dollars. So, why should the percentage of royalty be the same for both? A very good comparison is the British system. In Britain there is a proviso for compulsory licence and royalty is established by the Controller of the Patent Office. He fixes for example at 10 per cent. But in England it is not of the bulk price but of the price of the speciality and the decision of the Controller is subject to High Court decision. In one of the most recent cases it was fixed at 18 per cent because the court felt that the patentee has invested such a terrific amount on his invention that one who gets results must contribute something to the research expenditure. I believe that in each individual case it should be discussed, perhaps together with the Controller of Patents.

Shri B. K. Das: If the parties are not satisfied with the decision of the Controller, you want the matter to go to the court or to the Government?

Dr. E. Jucker: It should go to the court.

Shri B. K. Das: You do not like the provision about licensing rights even for a country like India?

Dr. E. Jucker: No.

Mr. Chairman: Even countries like USA and Germany have a provision for licensing rights.

Dr. E. Jucker: No, India is the only country which has got such a provision.

Mr. Chairman: UK has it.

Dr. E. Jucker: I am sorry to contradict you. It is different. It is this way. In various countries the inventor, themselves have the right to endorse their patents with the words "licence of right" but in each case it is done individually if the patentee wants to offer his invention for licensing. In the Bill it would be done automatically without the patentee's consent with all pharmaceutical patents. That is the difference.

Shri P. S. Naskar: You have laid so much emphasis on research and basic research of which you are a scholar. Do you think that research expenditure is a factor for the high prices of drugs?

Dr. E. Jucker: It is one of the factors.

Shri P. S. Naskar: You said a little while ago that 8 to 10 per cent of the total turnover is spent on research. After that statement, how do you say that it is a major factor for high prices of drugs?

Dr. E. Jucker: I would not say that it is a major factor.

Shri P. S. Naskar: Do you consider that research expenditure is one of the main factors for high prices of drugs? believe that drugs are sold at too high consider that research expenditure is

Dr. E. Jucker: First of all, I do not believe that drugs are sold at too high a level.

Shri P. S. Naskar: In India.

Dr. E. Jucker: I do not know the Indian price structure.

Shri P. S. Naskar: You said that you have visited India five or six times. Do you not care to find out about antibiotics and other life-saving drugs, whether they cost more in India than in other countries? You have come to give evidence before this Committee and I thought you should have had a little information on that point.

Dr. E. Jucker: I am very sorry. I came here as a research chemist and not as an expert on prices.

Shri P. S. Naskar: You made out the point that patent is necessary for an incentive to research; so, I am asking you whether you think that research expenditure is one of the main factors for high prices of drugs. We in India consider that drugs imported into this country from America, Switzerland and other places are costlier than in other countries.

Dr. E. Jucker: It is a very good question, but it is not easy to answer.

Shri P. S. Naskar: If you have no answer, please say so.

Dr. E. Jucker: I would like to tell you that one of the major factors is the packing of the drug for which we are not responsible. The aluminium tube or a proper packaging sometimes is so costly and we can do nothing about it.

Shri P. S. Naskar: I am restricting my question only to research expendi-

ture. I am not going into allied expenditure. Would you say that research expenditure is one of the main factors?

Dr. E. Jucker: Yes, Sir.

Shri P. S. Naskar: If I asked you to give a detailed financial statement of your company, that is, Sandoz....

Dr. E. Jucker: In Switzerland these figures are published; they are available to the public. I do not know how they are handled here.

Shri P. S. Naskar: From your detailed financial statement could you show that research expenditure is higher than 8 to 10 per cent of the total turnover and how much is spent on fundamental research out of those funds for research?

Dr. E. Jucker: When I am speaking about basic and fundamental research, I mean research which is not carried out for the specific purpose of finding out a drug; therefore, our expenditure does not go into what I call basic and fundamental research because that is done by universities.

Shri P. S. Naskar: So, basic research is mainly done in universities or public laboratories.

Dr. E. Jucker: What do you understand by "basic research"?

Shri P. S. Naskar: You said "fundamental research".

Dr. E. Jucker: By "basic and fundamental research" I mean research not directly applicable to drugs.

Shri P. S. Naskar: So, basic research has nothing to do with patent. Do I take it?

Dr. E. Jucker: No, Sir.

Shri P. S. Naskar: You said that Sandoz has got only one patent perhaps in this country.

Dr. E. Jucker: Not patent; I said that of our products not more than two are patented.

Shri P. S. Naskar: That means, most of the Sandoz products in this country are unpatented. Has that affected your sales in this country?

Dr. E. Jucker: This cannot be answered because up till now we have been working under the old law.

Shri P. S. Naskar: You say that a patent is necessary for all drugs, but, at the same time, you say that Sandoz has one or two patented drugs; mostly they are unpatented drugs which are sold in this country. That being the position, how has it affected you?

Dr. E. Jucker: I assume that if we had patented all our products our sales would be higher; but it cannot be established because we do not have the patents any more.

Shri P. S. Naskar: It has not affected the sale.

Shri E. Jucker: Of course, it has affected.

Shri P. S. Naskar: Have your sales increased or decreased?

Dr. E. Jucker: Of course, they have increased but with some exceptions. If you have competition with those who sell the same substance without having had the research expenditure the price is probably pressed down.

Shri P. S. Naskar: The relationship is between sale of the product and patent, which is not all the time correlated.

Dr. E. Jucker: It must be correlated.

Shri P. S. Naskar: But here you are making so much money on unpatented drugs.

Dr. E. Jucker: I do not know how much money we are making here, but these drugs have been on the market

for so many years and are sold for their quality and the firm's name.

Dr. C. B. Singh: How does payment to a research worker compare with the payment to the administrative head of your department?

Dr. E. Jucker: In my country research workers are paid very well, usually higher than the corresponding ranks in administration.

Dr. C. B. Singh: How much money has your firm spent on research in this country?

Dr. E. Jucker: I am sorry that I am not in a position to answer this question because I do not know the exact figures; but we spend quite a lot of money. I can say that for the following reasons, about ten years or so ago, we extracted a compound from an Indian plant podophyllum. This plant is not available in larger quantities. We had to cultivate it first; the whole botany cultivation and everything had to be studied. We have farms established and we are spending lots and lots of money millions of rupees, on drug research in the natural products field. The exact figure I do not know.

Mr. Chairman: We have the information that international prices of some of the patented drugs are far lower than the prices that they are charging in India; if that is so, do you not want that the Government should take some steps to control prices by way of limiting the period or working of the patent?

Dr. E. Jucker: This question is a very important one, but I do not know the figures.

Mr. Chairman: If you want, I will give you the figures. Vitamin B-6 sells here at Rs. 800 per kilo whereas the international price is Rs. 206 per kilo. The international price of Vitamin B-12 (Merck, Sharpe and Donme) is Rs. 32 per gm, while the indigenous

price is Rs. 215 per gm. The international price of chloramphenicol (Parke Davis) is Rs. 100 per kilo whereas the indigenous price is Rs. 410 per kilo. Tolbutamide—the international price is Rs. 20 per kilo and the indigenous price is Rs. 75 per kilo. Vitamin A (Glaxo)—the international prices Rs. 54 per kilo and the indigenous price is Rs. 421 per kilo. Procaine Hydrochloride—Rs. 8 per 500 gm. is the international price and Rs. 21 per 500 gm. is the indigenous price. Tetracycline Hydrochloride—Rs. 107 per kilo is the international price and Rs. 1,147 per kilo is the indigenous price.

Dr. E. Jucker: How was the international price established? For example, Tollulamide is marketed—it is Uggoha product—and there is no such figure of international price for Toleulamide. Is it the price for the bulk? Is it for speciality? All this must be taken into consideration. Do you take into account the packaging cost? The packaging in this country is much more expensive than what it costs in other countries because of the climate. This must also be taken into consideration. Only then, one can compare the prices. May I say your approach is not too good. I think the drug prices must not be controlled by the patent system. Our experience shows quite clearly that in a country like Italy where there is no patent system for pharmaceuticals, the drugs are not cheaper there. Many of the items are very expensive. I do not see how we can relate the prices of pharmaceuticals with the patents system.

Shri D. P. Karmarkar: Along with the grant of patent, you get the exclusive right of sale and, therefore, it is expensive. It is just possible that the prices are lower in the world market because there is competition. Here, because of the protection, the product costs more.

Mr. Chairman: They have a patent for exclusive manufacture and for sale.

Dr. E. Jucker: May I ask one question? Why the cars manufactured in this country cost more than two times or so as compared to the cost abroad?

Shri D. P. Karmarkar: In respect of cars, we have not given them the exclusive right of importation and sale. Now, the moment you get a patent, you have the right to import your own product. It is a fact that what costs Rs. 120 in Switzerland costs Rs. 300 or Rs. 500 here depending on the price. I wish you appreciate that there is a strong feeling in this country. In order to meet the reasonable requirements of the people at reasonable prices, the State may have the power to intervene. If you are going to be unreasonable, then we shall see to it that you are reasonable. That is the point.

Dr. E. Jucker: May I say one thing. The hon. Chairman was going through the list. Not all the drugs that were mentioned are patented. Therefore, this difference in price also exists in respect of those drugs which are not patented in India. So, according to my humble opinion as a chemist, there must be other reasons as to why the drugs are costlier here than abroad and I do not think that the answer to this problem which is a very severe one is patents.

Mr. Chairman: Thank you very much.

Dr. E. Jucker: Thank you, Sir.

(The witness then withdrew)

(The Committee then adjourned)

MINUTES OF EVIDENCE GIVEN BEFORE THE JOINT COMMITTEE ON THE PATENTS BILL, 1965
Saturday, the 23rd April, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Shri Panna Lal Barupal
3. Shri Dinen Bhattacharya
4. Sardar Daljit Singh
5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri Kashi Ram Gupta
8. Shri Prabhu Dayal Himatsingka
9. Shri Braj Behari Mehrotra
10. Shri Bibudhendra Mishra
11. Shri P. S. Naskar
12. Shri R. Ramanathan Chettiar
13. Shri Sham Lal Saraf
14. Dr. C. B. Singh
15. Shri Balkrishna Wasnik

Rajya Sabha

16. Shri Arjun Arora
17. Shri Vimalkumar M. Chordia
18. Shri R. S. Doogar
19. Shri D. P. Karmarkar
20. Shri B. T. Kulkarni
21. Shri Dahyabhai V. Patel
22. Shri Mulka Govinda Reddy
23. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY

1. Shri K. V. Venkatachalam, *Joint Secretary, Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Bombay.*
3. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*
4. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

Prof. G. H. C. Bodenhausen, *Director of United International Bureau for the Protection of Intellectual Property (BIRPI), Geneva.*

Prof. G. H. C. Bodenhausen, Director of United International Bureau for the Protection of Intellectual Property (BIRPI), Geneva.

The witness was called in and he took his seat.

Mr. Chairman: Mr. Bodenhausen—we have received your memorandum. The evidence that you give here will be printed and published and distributed to the Members and also laid on the Table of the House. If you want anything to be kept confidential, even that portion will be printed and distributed to the Members of the House. Your memorandum has been distributed to all the Members. If you want to add anything, you may kindly do so.

Prof. G. H. C. Bodenhausen: With your permission I would like to add a few words to the memorandum that has been distributed.

My first remarks concern my personal background because I think members should know something about me to understand my position better. I have been a Barrister since 1928 and took the first patent case in 1931. Afterwards more patent cases and trade-mark cases followed and I have become a specialist in this field. In the last 15 years of my practice I have not taken any case but cases of patents and industrial property and my experience is mainly with patents and trade marks within my country, the Netherlands. I have been appointed in 1946 as Professor of Intellectual Property Law in the University of

Utrecht and I had an opportunity to teach industrial property law especially patents for 16 years. Then of course I acquired a more general knowledge because I had to survey also other legislations on patents. Then in the beginning of 1963, 3 years ago, I became the Director of the United International Bureaux for the Protection of Intellectual Property in Geneva which, as you may know, is an inter-Governmental organization and the joint secretariat of the Paris and Berne Unions. India, while it is a member of the Berne Union for the protection of copyright, is not a member of Paris Union for the protection of industrial property like patents and trade marks. This latter convention now comprises 74 States—75 States if you take into account the German Democratic Republic. The composition and membership of the Paris Union makes it obligatory for us to be completely neutral—politically neutral and as far as we can technically neutral too. Amongst its members are not only important industrialised countries of the West such as the United States, U.K., Federal Republic of Germany, France and Japan but also all Communist States including the Soviet Union, with the exception of China and Albania. Part of our membership consists of States which have a highly developed industry and are very prominent in industry and commerce such as the USA. But a large majority of the Member States are of course developing countries—Many in Asia, many

in Africa and some also in Latin America. This is just to tell you why our approach to problems in the sphere of patents and trade marks has to be neutral and objective.

We try to give, if desired by countries, technical assistance. I have not come here to convince you of anything. I am here at your disposal. If you want to put questions to me I will try to answer them to the best of my knowledge.

But I want to tell you at the start that I do not want to take sides on your Patents Bill. It is your responsibility. I am here to tell you what I think of it as being a Patent specialist for many many years and in charge of an international organization in this field. We have some experience also with the problem of giving technical assistance to developing countries in the field of patents and more with industrial property in general. We have organized seminars in different parts of the world—the first one was held in Africa, the next was in Latin America and the third was held in Ceylon where we had also representatives of India who participated in this Seminar. We had fair and frank discussions on all the problems of industrial property which are interesting to developing countries. I know there cannot be any comparison between some of these countries because of differences of development, size and interest. We have had many dealings with them. I think we are making progress in understanding their problems. We have made a Model law on patents and are now working now on a Model law on trade marks. We have a programme of training. We have trained officials—many patent officers of developing countries, who wished to improve their knowledge and we also give technical assistance to Governments which require such assistance on their legislative and administrative problems. We gave assistance to the Government of Algeria on their Patent law and we have given the same assis-

tance to other African States, for instance, Uganda, Kenya and Tanzania. We have assisted the Governments of these countries in drafting patent legislation, of course leaving the entire responsibility to them. I will take one example, Algeria. There they have a new patent law which came into force on 1 March this year. They have ordered that patents or inventors certificates derived from the Communist System can be taken out at the choice of the interested enterprises or men, but for nationals only an inventor's certificate can be granted and no patent. I personally think that this regulation is unwise. It creates an imbalance in the economy, but it is their decision. I have not tried to convince them that it is not the right way to deal with the problem.

I want to come now to the Patent Bill which is before you. I hope that you will not identify me with any particular interests, neither with any group of industries or commercial people nor with any group of States, because in my organisation all States are equal and we do not take sides at all. I am here—I repeat—to give you my views to the extent you wish and not to convince you. The only point of view which is valid on this issue is what is good for India. I have tried very hard to live with this problem in this sense that I can feel what you need and give you advice as to what will be the best procedure to get what you need. My memorandum has also been drafted only from this point of view and I have to apologise to you for the rather critical tone of it. I had to strike this tone in order to make my point clear and to warn you that in my view you will not succeed with this Bill as it stands. In a few moments I will explain my views. Of course, it is true that this Bill has good points too and it has even definite improvements over the U.K. law, which clearly has been the starting point also for the existing Indian Patent Act. The principle of absolute novelty which is introduced now in

your Patents Bill and also the fact that the non-obviousness of an application has to be examined from the start—that from the first moment it has to be judged whether there is invention or not—not as in England where it is left to be considered in a further stage, are the two main improvements.

Mr. Chairman, I regret to repeat that my main impression of the Bill is that it will not be good for India and the reasons are these. I think there is—it is perfectly justified also—a fear of patents, the fear of the restraint of competition which patents may cause. But this fear has overshadowed to a very large extent all other considerations. In the Bill, as it stands, the good influence of patents has practically disappeared. No doubt this Bill is against the abuses, but a patent law is supposed to do some good too. The fight against the abuses has been so strengthened in the Bill that I don't see it will work to a good purpose any more. I will explain that more fully. The country I come from does not have tigers, but you have plenty of them. They are dangerous animals; they are obnoxious and they can present dangers to the society. The measures which have been taken in this Bill reminds me of another measure—which you may take—by which you decide to do away with all animals, to eliminate the danger of tigers. To be sure that all tigers will be killed you would kill all animals. Surely the balance of Nature will be upset. It is not a logical measure which would kill both the advantages and the disadvantages of animals.

On page 5 of my memorandum I have pointed out a few technical features which are most important. The main point is that the very short duration of a patent would not encourage anyone to start an industry, because when the industry starts, the patent will be about to lapse. The intention will have no protection during the time he needs it. Another difficulty lies in the very large powers

given to the Government. I know this comes from the British law. Only the countries in the British Commonwealth are under the influence of the British legislation and in no other country such powers are given to the Government. In other countries, if the Government wishes to exploit a patent, it has to take a licence like anybody else. Sometimes they may have to obtain a compulsory licence. The English system dates back even before the Statute of Monopolies in 1624 when the patents were considered a monopoly given by the State, by the Crown, freely and arbitrarily. The Crown then retained of course the power of use for itself, which in modern technology and modern political and economic circumstances, I think, is not justified any more. It is certainly not justified to the extent in which it practically destroy the encouragement which exists in the patent system to establish industries. Then, under the system of compulsory licences and the automatic licence of right, the patentee has only the right of remuneration. It has been fixed in some cases at 4% which seems unscalistic. If I may add a few words in general about the uselessness and the dangers of a patent system not only with respect to India but for the economy of any country, the patent system is only one of many many factors that influence the national economy. There are many other factors like the security of investments, education of labour force, tax facilities and so on. The patent problem may not even be a major one. It is scientifically impossible to prove the value of a patent system. We cannot compare the same situation of the same country in the same period with and without patents. It remains an impression. It is like your getting well after taking medicine for some time. It may be that you would have got well also without medicine but when? Nobody can prove that it is because of the influence of the medicine you have got well. On the basis of the experience that many people have taken the same thing and become well, you can pro-

bably form to the impression that the medicine has helped you also. The same is the case with the patents. When we compare the U.S.A. and Japan and see that their patent laws have proved a success, we feel that a good and strong patent system has a healthy influence on industrialisation. It encourages research and it encourages investment in industries. I agree it is not scientifically proven, but it is the impression we get when we see the patent system in operation in different countries.

I think another advantage you get is that the patent system provides more transfer of know-how under licence contracts. You get better know-how. It enables you to carry out inventions in the best conditions.

There is an interesting statement in the recent report of a United Nations body. It is in the report of the Advisory Committee on the Application of Science and Technology to Development. It says, even complete and frank disclosure cannot invest the recipient with the integrated operative experience needed to assure the effective and economical adaptation and utilisation of the technology involved.

Now, what are the advantages and what are the dangers of the patent system? I will first deal with some dangers. Of course, the system has dangers. First of all a patent is temporarily a monopoly which can put limitations to the manufacture or importation of useful materials or substances. Its effect is also in most countries to enlarge foreign influence. In many countries, almost all countries, the number of patents taken out by foreigners is greater than the number of patents taken out by nationals. The exceptions are only some industrial giants such as Soviet Union, United States, Federal Germany and Japan where local industry is so strong. There inventions are so many that they beat all the other countries together. But in almost all countries the situation prevalent is that foreign

patents out-number national patents. I am familiar with Netherlands and where we have more than 70 per cent foreign patents. It is not entirely disadvantageous because under the foreign patents you can have national licensees. This is the way the patent system normally operates.

The other disadvantage or danger is high prices which is no doubt uppermost in your minds. Under a patent system prices can be higher because the patentees and licensees can control more and there is no free competition. Nevertheless, this has to be considered with great care even in the case of medicines. There is one country in Europe—Italy—where patents are available neither for medicines alone, nor for processes to manufacture medicines. On this basis one would expect that the prices of medicines would be lower in Italy than elsewhere. I do not think this is true. I think in the free competition prices have a tendency to go up because of competition. The competitors make propaganda and publicity and spend more on these than on research. It is however true that patent do not lower prices. The price factor is certainly important and especially in India. What is the remedy for this? It is really necessary to do away with the patent system or part of the patent system or should there be price control by law allowing the patentee or licensee the right to produce or import at fixed prices and if he does not wish to accept these, be subject to a compulsorily licence? Which is more flexible?

I would like to draw your attention to a few comparisons with other countries. The comparison I have in mind is on the one side United Kingdom and on the other side Japan. The United Kingdom patent law is not a very strong patent law when you compare it with other laws of countries which can be compared with United Kingdom. They have a number of exceptions, compulsory licences, shifting of the onus of proof, etc. which

are unusual. I remember the time when this law came into being. It seemed doubtful then whether it could give strong inducement to industries which any patent law is supposed to have. I do not know how for the United Kingdom can get away with that. There is now some economic illness in that country. I do not think it can be attributed to the patent system alone, but perhaps to some extent the patent law is responsible.

Now take the case of Japan which was completely ruined after the last war. Maybe under pressure from Americans, the Japanese adopted a strong patent law. It is even one of the strongest in the world. It may not be entirely due to this that Japan has come up. There may be other reasons. For instance, Japanese are industrious. They have a well developed technology. Maybe they have a good tax system. I am not a tax specialist and therefore I cannot speak of tax system. But one of the many factors influencing industrial development is whether your patent law is good or bad. After giving these examples of United Kingdom and Japan, I will wind up with one other remark.

It is a pity that India is not yet a member of the Paris Union. That would have been better for purposes of consultations with your Government on the modifications of the patent law in order to strive what in my view would be a better balance. It is unfortunate. Nevertheless, I am very happy to be here to give my opinion and have an exchange of views with you. You would have to make a choice whether to keep this Bill or to throw it out. I would say that some of the provisions are good or at least they may be worth while trying. In other respects, I fear it will lead to disaster in the field of patents. One of the things you have to think about is the exclusion of patents in regard to pharmaceutical and chemical products. This exists in many other countries. It is for you to decide whether it is good or bad. I think you

have your own experience. If you do not like it, try it without. A thing you should not keep is the limited duration of patents, that is, ten years. It is really too short. Nobody will ever dream of investing his money under a patent when it lapses the minute you invest and you start operation. It should be at least raised to 14 years. I am strongly of the opinion that this should be amended. Government powers are also in my view developed too far. How can you expect anybody to invest lot of money under a patent when he knows Government will be his foremost competitor? He will ask himself the question: Shall or shall I not build an industry in India? He will not do it if the Government could come in and compete royalty fee. Also, compulsory licenses should be limited. They go too far. I don't think this Bill will be good for the development of industry in India.

Thank you very much.

Dr. C. S. Singh: You just now mentioned that India is not a member of the Paris convention. Do you know the reason for that? What is that?

Prof. G. H. C. Bodenhausen: I don't know the reason. The reason may be, or may have been that India wanted to conserve more liberty in drafting legislation.

Dr. C. B. Singh: Government of India must have some good reason not to become a member of this convention. Will you be able to throw light on that?

Prof. G. H. C. Bodenhausen: I am not informed of the reasons.

Mr. Chairman: He does not know.

Prof. G. H. C. Bodenhausen: The reasons are not known to me.

Dr. C. B. Singh: In respect of changes you have mentioned monopoly and heavy foreign influence and prices. Last item is prices. We are concerned with this part of it. How can we safeguard the interest of the general public in this price part of it? Can we do

something by which prices can be so adjusted that heavy charges need not be paid? The prices should be reasonable—not harming the investor, not harming the consumer, not harming the Government. What will you suggest?

Prof. G. H. C. Bodenhausen: There is this proposal of mine to introduce in this Bill the power for the Government to fix prices for patented products. The Government can fix a maximum price. When the patentee does not accept the price he will stop production or stop importation, but then becomes liable to compulsory licences.

Dr. C. B. Singh: What is the basis for fixation of price? Is there some scientific data or what do you suggest?

Prof. G. H. C. Bodenhausen: I don't think you can generalise in this matter. It depends upon various things—it varies from one field to another. You can empower government to fix prices for patented products of drugs from patented processes. There should be some organisation for this including technical and economical experts.

Dr. C. B. Singh: A case was made out that heavy price is one of the reasons, as, they spend lot of money on research. That is what they say and our opinion is this. They spend not so much on research, but on processing, and advertising and other things. One suggestion is made that that money should be earmarked for research. What do you suggest? Can they earmark certain percentage of profit by which research could be encouraged? What do you suggest for that?

Prof. G. H. C. Bodenhausen: It is difficult to suggest a solution. You cannot force an entrepreneur to invest. There may be a period when research is carried out to a great extent. There may be another period when the product described has to be developed and so on and so forth—I don't think you can make a rigid rule.

I don't think you can give a general solution to that problem. When the patent system is strong the patentee will, of necessity, invest in research. He will expect that by research he will find out new things and he will profit by such research. When you have a system of price control it is not feasible and not necessary to make a provision that the patentee has to spend all that money on research. That should be left to his discretion.

Dr. C. B. Singh: You said that one of the worst feature is the fixation of the period of ten years. You said ten year period is not advisable, it is one of the worst features, etc. What do you suggest for that? There are two extremes: One is, no period at all; another view is, have it for 20 years. We have brought down a compromise and we have fixed 10 years. What do you suggest now in this regard?

Prof. G. H. C. Bodenhausen: It is all right having 16 years with possibility of extension in cases where the patentees for some objective reasons have not earned a profit.

Shri Basanta Kumar Das: The Bill should safeguard against the abuses. You said about that. Have you got any idea as to how the abuses are prevailing in our country? What are the abuses that are prevailing in this country?

Prof. G. H. C. Bodenhausen: They are the same abuses you find everywhere. There is the lack of local manufacture and importation sometimes at fairly high prices. The procedure of control may be improved. But the means for this are already there under the existing Act.

Shri Basanta Kumar Das: There is too much of profiteering in this country. Prices of medicines are so high, patented or imported. Do you know some such cases?

Prof. G. H. C. Bodenhausen: I do not know the figures. There may be some cases of high prices in comparison with

other countries, in the East. One thing we should remember. The patentees are not angels. I think every Government and every country is entitled to protect itself against prices that are too high. I do not see any objection to it. Only you should not abolish for that the whole Patent system.

Shri Basanta Kumar Das: But here the Patentees are not manufacturing the product but simply importing them. How can we prevent this abuse?

Prof. G. H. C. Bodenhausen: Both in your existing Patents Act and in the present Bill you have got provisions for compulsory licences and you can apply these. May be it has not been done many times. It may be due to two factors, I believe. I am not absolutely well-informed about Indian Law of procedure. I believe the procedures are cumbersome. Also when there is a threat of compulsory licence, many times people come to terms because otherwise there will be enforcement. So the patentee prefers to grant a licence voluntarily and he would then also give the technical-know-how which is very important.

Mr. Chairman: So, when the patentee abuses his patent you support the compulsory licence provision that is in the Bill?

Prof. G. H. C. Bodenhausen: Yes; only that should not be overdone.

Shri Basanta Kumar Das: Do you think that the provisions of the Patent Law which is already in existence in this country i.e. the 1911 Patent Act are better than the provisions of the present Bill?

Prof. G. H. C. Bodenhausen: Yes.

Shri Basanta Kumar Das: In your opinion we should continue that Act?

Prof. G. H. C. Bodenhausen: I would prefer the existing Act; I would much prefer the existing Act to the present Bill. Of course the present Act can be improved. You can make

a few improvements for instance, in procedure; making compulsory licence more accessible and cheaper to get. But I think when you change from the existing law to a law according to the Bill, you would be taking a step backward. It will be a disadvantage to your economy and scare away foreign investors.

Shri Basanta Kumar Das: But as regards investment by other countries in our country we want foreign investment in this country as we are still in the developing stage. In your view this Bill will shut the door completely.

Prof. G. H. C. Bodenhausen: I won't say 'completely', but it will gravely endanger the situation.

Shri R. Ramanathan Chettiar: In your remarks earlier you had said that you do not represent any interests or you do not represent any point of view while giving evidence before this Select Committee. But from the course of your remarks one has to come to the conclusion that you are representing some vested interests who want to have a monopoly in this pharmaceutical industry because you yourself said 16 years and you yourself said that the present Bill is not good in the larger interests of this country and there practically you are voicing the view-point of the vested interests in the pharmaceutical industry. There is one other point and your reasons have not been convincing for us to come to the conclusion...

Mr. Chairman: It is not fair to comment like that. He has given his opinion. You may have your own.

Shri R. Ramanathan Chettiar: He had requested us saying that he has come here as a dis-interested person.

Shri Sham Lal Saraf: I object to this sort of question.

Mr. Chairman: He has given his opinion.

Prof. G. H. C. Bodenhausen: I have no objection to answer that.

Mr. Chairman: He has given his opinion. You may have a different opinion. You can ask questions on facts.

Shri Arjun Arora: The witness is prepared to reply.

Shri R. Ramanathan Chettiar: He is prepared to reply. Had he not said that, I would not have asked him this question.

Mr. Chairman: It is not fair.

Shri R. Ramanathan Chettiar: I have no other question.

Prof. G. H. C. Bodenhausen: It is true that I represent any particular interest, especially in pharmaceutical industry. But, of course, when one studies on a subject like this—the Patents Bill—and one asks oneself whether this Bill will work well or not, in my view and within my limited experience, the conclusion is that the Bill will not work to the satisfaction of India. The fact that I do not represent or cannot be identified with the interests of pharmaceutical industry is proved by the fact that when summing up I said that if you want to make some changes, you can keep the exclusion of patentability of pharmaceutical substances. If I represented the pharmaceutical industry, I would not have said that.

Shri R. Ramanathan Chettiar: There is another point. How do you say that the present Bill will retard the possibility of foreign investment in this country?

Prof. G. H. C. Bodenhausen: Not only foreign investment but also any investment by Indian entrepreneurs. In my view they will be very hesitant to do under the provisions of the present Bill as there will be constant danger. Government will have a free right; there will be compulsory

licences and licences of right and the patent will have a very short duration.

Shri R. Ramanathan Chettiar: There are countries which are members of the Paris Convention where the Patent Law is far stricter than as envisaged in our Bill. Yet, it has not retarded the foreign investment.

Prof. G. H. C. Bodenhausen: I do not know any existing Patent law which goes so far in limiting patent rights.

Shri R. Ramanathan Chettiar: Your own country—Netherlands.

Prof. G. H. C. Bodenhausen: No. We have a compulsory licensing system just enough for the general interest and the interests of industry. After 3 years you can apply for compulsory licence. Nothing wrong that. It is much weaker and there is no revocation at all like the Japanese law. I think I can fairly say—I have not studied all the Patent Laws of the world—as far as my knowledge goes, this Bill goes much farther in limiting the Patent system than anything I know.

Shri Arjun Arora: What do you think about the proposition that a country should give patent rights only to those who are prepared to and actually do manufacture the patented item within the country and do not utilise their right of patents to import?

Prof. G. H. C. Bodenhausen: Under that system you can get the patent only when you commit yourself to exploitation in the country itself and not import. The difficulty is this. At the moment one applies for a patent nobody can know what he can invest. It is dependent upon various circumstances on labour force, on establishment of industries, on transport, so many problems are involved. It is better to make the patent freely obtainable but then the patentee has to

exploit. If necessary there will be a compulsory licence. That will be a better system than to grant the patent only on the condition that patentee will exploit.

Shri Arjun Arora: The proposition which you advocate, in more ways than one, gives the patentee such a right to go on importing for a long time to come.

Prof. G. H. C. Bodenhausen: There should be a procedure quicker and less costly for giving compulsory licences. When you have this, this evil system of importation for a long period will disappear.

Shri Arjun Arora: Is it so, that because of the existing patent law prices of drugs and medicines are abnormally high? Should they be less privileged?

Prof. G. H. C. Bodenhausen: You can limit prices in many ways. Government can fix prices. For that it is not necessary to abolish the patent system. That was my point. I would remind you of the example of the tigers.

Shri Arjun Arora: What do you advocate as plausible reasons for the period of 16 years—which is fairly long period?

Prof. G. H. C. Bodenhausen: I have no special preference. I don't think it is wise to change your law. 16 years is not a long period. Other countries have 18 years or 20 years. The position is this. In modern technology inventions age quite rapidly. Many inventions are useful only for three or four or five years. But there are also exceptions, and for these cases it is not wise to limit the patent to a very short period—it impairs the establishment of industries. I have worked with industrialist for a good part of my life. They are not angels. They will establish industry only when they expect some profit.

Shri Braj Behari Mehrotra: When these patentees charge more higher price than the international price, is not the only remedy to impose restriction for 10 years for patents?

Prof. G. H. C. Bodenhausen: The remedy will be a law enabling Government to fix the ceiling of prices for all products, pharmaceutical products and also others. It will be a good solution, because if the patentee is not willing to meet that ceiling of the price, you give compulsory licences to Indian industry.

Shri Braj Behari Mehrotra: You are prepared to agree for patents of 16 years and 20 years. Will you not agree for 10 years when these high prices are charged in India for medicines in relation to prices of international market?

Prof. G. H. C. Bodenhausen: I can say that too short a period defeats the very purpose. It takes away the harm but it takes away the advantage also.

Shri B. T. Kulkarni: You said that this present Bill is an improvement on the U.K. provisions. I would like to know more about it.

Prof. G. H. C. Bodenhausen: It goes further than the UK Provisions. United Kingdom limits the examination of novelty to publications in England, which means that something which is not novel in another country say, France or Germany, still gets a patent in England, if it is new in England. You may obtain, a British patent for subjects for which you cannot obtain a patent elsewhere. It is a continuation of the old conception of the 17th century. It was difficult for the inventions from other countries to come to England over the English Channel. That was the reason. In your Bill it is said that the patent

cannot be granted when the subject is published wherever and whenever possible. It is a big improvement in my view. It is different in England. It is much better as proposed in your bill and you get better results. You get good patents that way.

Shri R. P. Sinha: So far as the duration of the patent is concerned, 10 years for the pharmaceutical and chemical products is too small a period. You said about that. You said that the investor or the entrepreneur will not be able to earn enough profits in this short period. Profitability in the industry is very high—in chemical industry, in pharmaceutical industry, etc. There is a study made by the Reserve Bank. We find that the return on the invested capital is very high. It is higher than the return in other countries . . .

Mr. Chairman: You may give the figures.

Shri R. P. Sinha: I have not got it. You accept this from me for the time being. I can give the figure later on. The profitability is very high. This is what has emerged out of the independent study made by the Reserve Bank of India. It is accepted by the American and other foreign investors. If that is the criterion what is the justification for patents for such a long period, when the entrepreneur is going to get that much from India in 10 years as he expects from the other countries in fourteen years or fifteen years?

Prof. G. H. C. Bodenhausen: There is relation between the degree of profitability and the necessary duration of a patent. If it is true, I accept your data without questioning, that in India profitability is much higher than some other countries, there will be a motive to limit the duration of a patent because the patentee will have earned enough in first few years. But at the same time, ten years will be too short. Certain chemical and other tests must

be carried out. It will take some time even for the Government to give permission to make or sell the product. I think this might be true in India too. Even with higher profitability, what can you do when two years of the patent remain and then it becomes subject to free competition. I think ten years is unrealistic. If you say that there is high profitability, and it might be true, still the patent should last at least 14 years. Nobody will embark on exploitation when he has, after being given Government permission and after he has tested the invention, only two or three years to exploit it.

Shri R. P. Sinha: There are two types of cases: one, the inventions done here; and the other will be inventions done under foreign patents. They are usually put on the Patent Register after the product had been properly tested or tried in other countries. The period will start from the date when you file the complete specifications. We are told that it will take about two-three years for the grant of the patent. Probably the entrepreneur will start to establish his industry after this period. If we put it that the period should start from the period of the grant of the patent, will it serve your purpose and then will you agree to retain ten years without any change?

Prof. G. H. C. Bodenhausen: It makes it better. You give the protection the moment the patent starts. To start protection from the moment of the publication of the specification is illogical because you start protection at a moment when you do not have the patent. You have to wait for the grant of patent. Then only you can fight your competitors. If you say that it will start from the grant, it is better. I still hesitate to say that it should be ten years. It is not a sufficient period.

Shri R. P. Sinha: You get ten plus two.

Prof. G. H. C. Bodenhausen: Maybe ten years with extension. When a patent has reached the exploitation stage and when the patentee is not rewarded, there can be an extension of this period by five years. That is the position in some Latin American Countries.

Shri R. P. Sinha: You mean to say that where the Government find that it will be desirable to extend it, they should have power to extend the period upto five years.

Prof. G. H. C. Bodenhausen: It will be an improvement. Start protection from the grant and give power to the Government to extend the protection period.

Shri R. P. Sinha: Will that be more acceptable to you?

Prof. G. H. C. Bodenhausen: It will be more acceptable.

Shri R. P. Sinha: Would you tell me in how many countries does it start from the date of the filing of the full specifications and in how many countries it starts from the date of the grant and which is more popular?

Prof. G. H. C. Bodenhausen: I cannot exactly tell you. I think it is almost evenly divided. I am familiar with the Netherlands. There protection starts from the grant—it is 18 years from the grant.

Shri R. P. Sinha: The other point is regarding grant of patent of the product and the grant of the patent of the process. We have made that difference in our Bill. Do you think it is good to have the mixed system?

Prof. G. H. C. Bodenhausen: It is illogical to give protection both to the process and the product except in the case of chemical or pharmaceutical industry. I was a delegate at the Lisbon Conference for the revision of the Paris Convention about which there is a reference in the Ayyangar

Report. It was discussed whether it should be compulsory under the Paris Union to protect chemical products, not only the process. It was not accepted—those for it and those against it almost being equal in number. But the modern trend is that it is better to give it for both. There is however, a technical difficulty. Your Bill extends this limitation not only to medicines but also to chemicals which may serve as intermediary products. At the date of the application or the date of the grant of the patent or even afterwards, some chemical products may become useful for medical processes. I think you should confine the limitation to pharmaceutical products as such and introduce also the onus of proof which appears in many legislations.

Mr. Chairman: I think your model law says one patent for one product, one process and one patent. Am I correct?

Prof. G. H. C. Bodenhausen: We have this onus of proof question when there is a new product by the patented process.

Mr. Chairman: By the same intermediary products you may derive two or three products and then you claim patent rights for all those products. But your model law says—one product, one process and one patent.

Prof. G. H. C. Bodenhausen: It is not so. When you may obtain ten or more products through the same process, you can protect them all.

Mr. Chairman: Same intermediary products can be used for different products. That will be shutting out others.

Prof. G. H. C. Bodenhausen: I do not think that was the intention.

Shri R. P. Sinha: Don't you think it will be more in keeping with the modern trend that we have the process patented and not the products.

Prof. G. H. C. Bodenhausen: No, this is still an open question.

Shri R. P. Sinha: What is your experience in other countries about compulsory licence? Has it led to the industrialisation of the country or led to the putting up of the patented products manufactured in those countries? What is your experience in other countries?

Prof. G. H. C. Bodenhausen: I cannot give figures. The only thing I know is that the granting of compulsory licence is comparatively rare. It does not happen frequently.

Shri R. P. Sinha: The patentees themselves would like sometimes to have the products manufactured in different countries, provided there is market for them.

Prof. G. H. C. Bodenhausen: I think the clause of compulsory licence works indirectly by encouraging contractual licences.

Shri R. P. Sinha: We are concerned with the results. If the industrialisation takes place, we will succeed. Does it lead to industrialisation?

Prof. G. H. C. Bodenhausen: I believe it does.

Shri V. B. Gandhi: As you have seen the provisions of this Bill, we have been rather anxious to see that the patent holders are not allowed to charge too high prices for their products. You have suggested as one of the possible remedies some kind of price control. Do you know of any country where such a price control has been instituted and it has been working with some success?

Prof. G. H. C. Bodenhausen: After the last war, nearly all the countries of Europe adopted some system of price control and I think it worked comparatively well. Of course there also some loopholes can exist. But it is better than the drastic remedies proposed in this Bill,

Shri V. B. Gandhi: Do you suggest that provisions for price control could be incorporated in this Bill?

Prof. G. H. C. Bodenhausen: Yes.

Shri V. B. Gandhi: In that case, the incentives to the patent holders which he gets as a result of the monopoly element will be absent or will be to some extent reduced.

Prof. G. H. C. Bodenhausen: You have to strike a balance somewhere. If the prices are too high, then you have to provide measures for lowering prices trying at the same time to keep the incentives to the patentees at least to some extent.

Shri V. B. Gandhi: I want to know from you whether it will be feasible for the Government to consider all the elements before controlling the price, such as the expenditure which the patent holder may have met in arriving at the patent, the publicity expenditure etc. Then it should be ensured that the controlled price should also give some incentives to him.

Prof. G. H. C. Bodenhausen: The Board which advises the Government regarding fixation of ceiling price can hear the patentees individually and then it will be possible to arrive at a satisfactory price both ways.

Shri Himmatsingka: You stated that because of the wide powers taken by the Government under the provisions of this Bill, it will frighten away persons who want to have patents in this country. As regards the compulsory right, you say that if the royalty is fixed it will act as a disincentive. Would you be satisfied if the limit of 4 per cent is not fixed and the right is given to the Controller to fix the amounting according to the circumstances of each case?

Prof. G. H. C. Bodenhausen: That would be an improvement. It is unfair to fix 4 per cent. There might be cases where 4 per cent may be too high when the product is cheap and

sold in good quantity; 1 per cent may be a satisfactory rate in such a case. Where it is very expensive to make a product, 4 per cent royalty will not satisfy.

Shri Himatsingka: Would you agree with the suggestion that the period begins to run from the date the patent is granted and not from the date of application . . .

Mr. Chairman: From the date of specification, not application.

Shri Himatsingka: Yes, from the date of specification.

Prof. G. H. C. Bodenhausen: That would be an improvement.

Mr. Chairman: He has agreed to that.

Prof. G. H. C. Bodenhausen: Yes.

Shri Himatsingka: In that case, what would be the protection in the interim period, i.e. from the date of specification to the date the patent is granted?

Prof. G. H. C. Bodenhausen: Under some legislations there is a stipulation that you can claim damages after grant of the patent even for the period before grant but after submission of the specification.

Shri Himatsingka: If there is a provision limiting the powers of the Government to use patents for its own purposes, will that satisfy the prospective patentees?

Prof. G. H. C. Bodenhausen: It would be an improvement. If you limit it to the extent as in the U.K. law, it would be less dangerous. Basically I don't agree with the whole idea of free use by the Government. When the Government wants to use patents, they can take a licence like anybody else. There can be compulsory licence under which royalty can be given. In Germany, Austria Switzerland, Scandinavian countries, Japan, and also in the USA when the Government wants to

use the invention, it applies for a licence.

Shri Kashi Ram Gupta: You have just mentioned that the Patent Law of the U.K. is a weak one while the Patent Law of Japan is stronger. Please explain it in detail as to how one law is weak and the other is stronger.

Prof. G. H. C. Bodenhausen: There is no revocation of patents under the Japanese system, while there is revocation under the English system. This revocation is an important thing for a patentee. It seems that the idea of this Bill and also of the Report of Justice Ayyanger is that there is advantage in doing away with patents, so that it is better to have revocation. However when you revoke a patent, you get to the situation where there will be no industry; nobody will be prepared to risk on exploitation of the invention. There will be more importation. That is why the Japanese have done away with revocation. The second difference is that the compulsory licence clauses are much narrower in Japan. There one can get a compulsory licence—I have got a book here on Japanese law—only when the patent has not been worked and when it is particularly in public interest.

Shri Kashi Ram Gupta: May I say that the Japanese law when compared to our present Bill in so far as the compulsory licence system is concerned, is more or less similar?

Prof. G. H. C. Bodenhausen: It is very dissimilar.

Shri Kashi Ram Gupta: In India there is a section of the pharmaceutical industry which is of the opinion and which has represented that there should be no patent law for drugs or if at all there should be one, it should be the present Bill enacted in the present form.

Prof. G. H. C. Bodenhausen: I think the Bill admits patentability for processes but not for substances in the pharmaceutical field.

Mr. Chairman: It is for us to decide.

Shri Kashi Ram Gupta: I want to know whether he has studied this aspect. That is my point. There is a section of the Pharmaceutical industry which has represented that there should be no patent law and if there has to be one, the present Bill will suffice.

Mr. Chairman: What is good for our industry—that is for us to decide.

Shri Kashi Ram Gupta: He has also given it to us.

Mr. Chairman: He has made certain general observations.

Shri Kashi Ram Gupta: In view of those observations, is this a fact?

Prof. G. H. C. Bodenhausen: The Indian Pharmaceutical Industry also tried to give me information but I do not want to be identified with their point of view.

Shri Kashi Ram Gupta: So far the pharmaceutical industry works in an organized way and the industry mostly has got its own research laboratories. Generally this research is a part of their annual budget and this is allowed as revenue expenditure under the Income Tax Law. Therefore, when you say that the industry may not be able to recover the money, when that expense has been allowed yearly and so after 8 or 10 years they become successful. Naturally it is not accepted on mathematical grounds to take out that expenditure on which income tax has been allowed. Therefore, that reasoning does not hold good these days. In view of this can we hold that this 10 years after the sanction of the licence as a reasonable period will suffice?

Prof. G. H. C. Bodenhausen: I still believe that the 10 year period is a misjudgment of the situation.

807(B)L.S.—17.

Shri Kashi Ram Gupta: My point is that the research expenditure is allowed as revenue expenditure and income tax rebate is given on that. Therefore, that burden is not there and we have to fix the period in relation to that.

Prof. G. H. C. Bodenhausen: There may be cases where 10 year period is enough and there may even be cases where even 5 years will be enough. But as a rule 10 years is unrealistic.

Shri Kashi Ram Gupta: The question is: the period is related to the amount of expenditure involved. Nowadays that changes vastly.

Prof. G. H. C. Bodenhausen: The patentee may have an invention now which yields enormous profits but which he found after enormous research. He tries many methods or products and only one succeeds.

Shri Kashi Ram Gupta: Can you give the example of any patent law of any developing country which has got similar conditions as India and which differs very much from the Indian law or which does not differ very much from the Indian law?

Prof. G. H. C. Bodenhausen: I do not know any developing country whose patent law resembles your Patent Bill. Your Bill goes much farther in limiting patent rights and allowing exceptions.

Shri Kashi Ram Gupta: Is there any law which resembles our law?

Prof. G. H. C. Bodenhausen: There is no law I know of.

Shri Kashi Ram Gupta: My last point is: can you give any suggestion for improvement of the Bill in so far as the question of fixing the period

within which the licence should be granted—say 2 years or 3 years. Formally there was a limit on the period.

Mr. Chairman: He has given us a model law.

Prof. G. H. C. Bodenhausen: 3 years is really the minimum period. If you make it still shorter it is again unrealistic. You will have to give the patentee some time.

Shri Vimalkumar M. Chordia: You must have come across cases where manufacturers charge different prices in different countries and India has been the sufferer in that respect. How to check this tendency?

Prof. G. H. C. Bodenhausen: Again I refer to this Board which would fix price ceilings for certain products. In this Board all evidence should be brought of such prices in other countries and the patentee should be called to explain the differences and why in India he should charge more? Is it because of transportation or any thing else?

Shri Vimalkumar M. Chordia: Do you agree to this point that there should be some provision in this Act so that the patentee should be asked these things and asked to lower down his price compared with the prices in other countries?

Prof. G. H. C. Bodenhausen: If you create this Advisory Board you can oblige the patentee to co-operate and give all information of prices in other countries and the expenses involved in his research.

Shri Vimalkumar M. Chordia: There have been instances where patentees charge twice or thrice the price of the product till their rights are there.

But, no sooner, he obtains exports, the prices come down and this tendency is very much. You have suggested price control but controlling of prices is itself a very difficult job and it may involve many things which may result in the increase of prices also. What practical remedy would you suggest so that the consumers' interest can be safeguarded and the patentees may also be benefited to the extent that they may not have to waste money on inventions?

Prof. G. H. C. Bodenhausen: I submit that the system of price control is difficult to establish and difficult to implement. But you may have to do it somehow. The patent system should be an incentive to industrialisation and at the same time curb the abuses.

Shri Vimalkumar M. Chordia: Do you not agree to this point that India is suffering heavily on account of drain of its foreign exchange? India is a developing country. The foreigners take grip of the developing country and we have to suffer every year greatly. Should we not have strict controls so that we may save the difficulty of foreign exchange also and give incentive to local inventors?

Prof. G. H. C. Bodenhausen: The problem of foreign exchange is of course very important. In our Model law we have a special provision that every licence contract has to be contract involving payments abroad has to be controlled by the Government and approved or disapproved. That is to keep the balance of payments position. On the other hand, when the effect of the patent law is that you would not further industrialisation but rather importation, the prices may be lower because of free competition but you would have to pay these prices for ever, which is also a drain of foreign exchange. There will be no industrialisation to take over unless the patent system is strong.

Your own pharmaceutical industry is already now working to a large extent on local products, the products of the country itself. Seventy to eighty per cent I believe it is so. It saves you money for payment of importations. I was in the U.A.R. some time ago which can be compared with India. 70 per cent of this pharmaceutical production is independent of foreign imports. It is impressive.

Shri Sham Lal Saraf: I want to know whether you are representing yourself here in your capacity as expert on important aspects of patent law or as representing a great organisation?

Prof. G. H. C. Bodenhausen: I am also representing my organisation.

Shri Sham Lal Saraf: You said, in your organisation you have both the western countries economy or capital system of economy and also the eastern economy. May I know what are the similarities between the patent law in western countries and also dissimilarities apart from whoever may be the beneficiaries.

Prof. G. H. C. Bodenhausen: In some of the Communist countries the patent law is very much like the patent law of the western countries. They rely on the same system. These are Czechoslovakia, Hungary, Yugoslavia and to some extent Poland and Cuba. There are 3 countries which have different system—Soviet Union, Rumania and Bulgaria. The system is different because you have a choice. You can apply for patents or inventors' certificate. In the latter case the right of explanation goes to the State, and you have the right to a remuneration according to certain rules. You can also apply for a patent which has almost the same feature as in western countries. In certain cases you can only have an inventor's certificate.

Shri Sham Lal Saraf: Regarding imparting of know-how, there are various foreign patents in an under-developed country and there are various service depots that have come into being and it is found that in over ninety per cent of our foreign patents registered here they import raw materials from their own country—outside India. Little effort has been made to produce patented drugs to a large extent within the State. They did not take steps in this direction. What would you suggest for safeguarding against that?

Prof. G. H. C. Bodenhausen: The problem of transfer of technology is a much wider one; it is studied by several bodies of the U.N. It is a matter of the transfer of the know-how. Know-how has to be paid for. U.N. will have an institution providing for funds to assist developing countries in paying for the technical know-how they need. That is a thing which escapes our organisation which deals with the technical and legal side. This particular problem is under consideration with United Nations.

Shri Sham Lal Saraf: Purchase of know-how is different from getting a patent registered here. Foreign know-how is patented and it is always that the country itself gets something out of it. That country will produce those things. Now, could you suggest something that will help us in this matter?

Prof. G. H. C. Bodenhausen: All these things take time. You have to be a little patient and see how things develop. You can create institutions to promote exchange of know-how and try to institute technical information centres or something like that. There are many means to try to improve the situation as far as the know-how in the developing countries is concerned. You should not cut yourself off from the flow of know-how in the international field.

Shri Sham Lal Saraf: Italy has no patent law for pharmaceuticals, chemicals and drugs. In our country we do have such voices that there is no necessity of having patent law. Please tell us whether this state of affairs has fareq well in Italy.

Prof. G. H. C. Bodenhausen: Italy will shortly create patents for pharmaceutical processes.

Shri Sham Lal Saraf: Is it due to the reason that the drugs which they manufactured and sent out were fond to be defective?

Prof. G. H. C. Bodenhausen: I believe they had many quality troubles when competition, completely free.

Shri Sham Lal Saraf: U. K. law is softer. Japanese law is harder. Is it due to more checking or what?

Prof. G. H. C. Bodenhausen: When you call U.K. law weak and Japanese law strong, I would say your Bill is much weaker.

Shri Sham Lal Saraf: What do you mean by that? From what aspect particularly will you say that the Japanese law is harder?

Prof. G. H. C. Bodenhausen: There are few exceptions to the rights of the patentee, few compulsory licences and there is no revocation and no automatic fixation of royalties. It gives the essential protection to the national economy. But it is not spelt out in so many exceptions in the Bill.

Shri Sham Lal Sarf: Instances have come to light where ridiculous prices have been charged for pharmaceuticals and medicines. In certain cases prices have been 300 to 400 per cent higher than those charged for these medicines by foreign

manufacturers elsewhere. Keeping that in view would you suggest that Government should have right or authority for importing such drugs and paying certain percentage of commission to the patentees registered in the country?

Prof. G. H. C. Bodenhausen: Under the Bill your Government would have the right of royalty-free importation of medicines. This is authorised by clause 48. This is too much. The system we have proposed in the Model law is quite different. It is compulsory licence with the possibility for the Government to declare certain classes of products for which licence can be given forthwith and also for importation of course against payment. But courts should fix the payment.

Shri Sham Lal Saraf: So the point is agreed upon that Government should have that right.

Prof. G. H. C. Bodenhausen: It is a matter of procedure. The procedure should be different. In your Bill exceptions are so strong and so numerous that the incentive for the investor completely disappears. We have tried in our Model law to keep that incentive.

Shri Sham Lal Saraf: Then I come to the point with regard to process and product. Would you suggest that in certain specifications the process also should be registered and in certain cases only the end product?

Prof. G. H. C. Bodenhausen: Yes.

Shri Sham Lal Saraf: Where the licence-holder or the patentee feels that he is harmed by the actions taken by the Government under the law, he can prefer an appeal. In this Bill it is suggested that such appeals may lie to the Executive. But you recommend that appeals should lie to the judicial authority. May I know what is the main plank on which you base this argument?

Prof. G. H. C. Bodenhausen: It is a matter of confidence. When you induce the industry to invest and when you have compulsory licence, appeal to the Government is not proper. You need a court for that. But it is very important to have the court procedure accelerated.

Shri Sham Lal Saraf: At the time of cancellation of certain data or revoking the licence or somebody placing a different process, at that time in order to prove that it is an improved process than what is patented for, the burden of proof should be on the new person?

Prof. G. H. C. Bodenhausen: Yes.

Shri Dahyabhai Patel: With your permission, I would request the witness to elucidate what he said about UAR. I could not quite follow that. Is their patent law similar to the law that exists here or is it a little harder or looser? What is the reason why they have been able to build up their industry? I can give you the background of my question. In this country, particularly in the matter of drugs and medicines, we had a very old system. The world has taken quite a lot of medicines which are known in this country though they are not perhaps practised in this country in the most modern scientific manner for lack of research. Still some of them have stood the test of time and some of the drugs that are known in the Ayurveda and Unani systems are very potent and effective. Why is it that we have not been able to develop these medicines? Is it because of this that some feel that a Bill of this kind is necessary for us?

Prof. G. H. C. Bodenhausen: With regard to UAR, I am not absolutely sure. I believe that UAR has a patent law which grants protection for both process and product in the pharmaceutical field. With that patent system, they have achieved some progress in the pharmaceutical field.

Your second question was about so many drugs which have not been developed in India. These things do take time. You have already a pharmaceutical industry in India which is now very much concerned with this Bill. Sooner or later research will more be developed. All these things take time—to train the people, to encourage the inventive spirit, etc.

Shri P. S. Naskar: I think we have come to the last lap of this questioning. I see in this booklet it is written—United International Bureau for the Protection of Intellectual Property. Do I take it that this intellectual property belongs to the inventor? Or, does it belong to some commercial firm who utilises that intellectual property for commercial purposes?

Prof. G. H. C. Bodenhausen: It depends on the national patent law. In many cases the inventor works for a firm in which he tries to invent. When he fulfils that obligation, the invention goes to the enterprise. The patent will go to the enterprise.

Shri P. S. Naskar: You said about investment and patentees. I have not heard anything from you about the individuals who invent. It is necessary to give them protection. Do you think in that context that the patent encourages invention especially in drugs?

Prof. G. H. C. Bodenhausen: If the inventor works for himself, he will get the patent without any difficulty for himself. If he works in any firm, he is working and trying to make inventions because when the firm makes profits he will also be provided for; he will get a higher reward; he will get bonus and also a part of the profit which the enterprise gains from his inventions.

Shri P. S. Naskar: You know that most of the life-saving drugs have

been invented in public laboratories which have no profit-making motive, life-saving drugs like insulin, sulphadiazine, etc.

Prof. G. H. C. Bodenhausen: I may be wrong, but I believe the laboratories of pharmaceutical firms also have inventions to their credit.

Shri P. S. Naskar: India is a developing country. Industrially we are trying to develop technological know-how, etc. But the research has not developed to the extent comparable to other industrially developed countries. Now the patent system as it exists today is detrimental to the national interests of India.

Prof. G. H. C. Bodenhausen: No. I think the patent system is a favourable system almost in any country. It provides incentives for investment in an industry. Of course, in the beginning stages of development it will be partly to the advantage of foreign enterprises. The other day I was talking to the Director of National Patent Office in Algeria. He was saying "we have to pass through that stage; we have to be patient and rely for a certain number of years to a certain extent on foreign inventions; but the Algerian inventions will follow soon after".

Shri P. S. Naskar: If that is so, why research is not being done in our country? Research is always done in their own country. After inventing it, the foreign companies come here and obtain the patent right for commercial purposes. How does it help the development of research in our country?

Prof. G. H. C. Bodenhausen: When you don't have a patent system, there will be no industrialisation at all.

Shri P. S. Naskar: They don't even take up research work in collaboration with our people.

Prof. G. H. C. Bodenhausen: Under the threat of compulsory licence they will do.

Shri P. S. Naskar: No such thing is being done by foreign pharmaceutical industries. Only the patent is taken out so that others are blocked. Hindustan Antibiotics had done a lot of research on tetracycline, but the Pfizer firm came and held up the work on account of their patent. The whole project is held up now.

Prof. G. H. C. Bodenhausen: Why don't you insist on compulsory licence?

Shri P. S. Naskar: We want compulsory licence. That is why we want to amend the Bill. I would plead with you to understand our difficulties.

Prof. G. H. C. Bodenhausen: I know the tetracycline case very well. By using your compulsory licensing system you would achieve better results. Even the best law cannot give you a solution when it is not used.

Shri P. S. Naskar: I find that your model law is quite suitable for newly independent countries as in the Continent of Africa where there is no existing patent office or industrial property office and they don't have a well-developed patent system. But we have a well-developed system, a patent office and also an industrial property office and everything. With this background, how does your model law help us?

Prof. G. H. C. Bodenhausen: I know that this Model law is of less use for you. Nevertheless, you can perhaps take out one or two stipulations which could fit into your system too.

Mr. Chairman: My friend referred to you about the foreign remittances. I will give you figures for the year 1956-57 and for 1962-63 in the shape of royalty remittances, technical service remittances, dividend remittances, etc.

	1956-57	1962-63
	(Rs. in millions)	
Roalty Remittances :		
Basic Industrial Chemicals	0.07	0.49
Pharmaceuticals	0.39	0.79
Other Chemicals	1.21	3.02
Technical Service Remittances :		
Basic Industrial Chemicals	0.11	2.13
Pharmaceuticals	..	0.43
Other Chemicals	0.01	5.22
Dividend Remittances :		
Basic Industrial chemicals	..	3.24
Pharmaceuticals	0.54	9.96
Other Chemicals	..	7.25
Total Remittances of all the above items	2.33	32.5

The prices charged have been nearly 3 to 4 times the international price in antibiotic drugs. You have said in the introduction to your model law that patent law is one of the factors that comes into operation in regard to the question of prices. That is true. But, with these things happening in our country, especially with our very large population and our people being very poor, don't you think that these restrictions for compulsory licence and licence of right are necessary in the interests of our public?

Prof. G. H. C. Bodenhausen: I don't pretend for a moment that the situation in India is satisfactory. I don't question your figures either. The question is whether you will be able to meet the situation with this patent Bill. I am sure that it will make it worse. You may find some temporary influence on the prices. But, as time passes, you will find that the prices will rise again because of the shortage of drugs; and people will not risk investment in India. Some other means should be found to influence the situation.

Mr. Chairman: One of the reasons you have given is that there is no right of judicial appeal. Would you be satisfied with a special Tribunal?

Prof. G. H. C. Bodenhausen: I am in favour of existing courts. Special tribunals are inclined to follow a different pattern.

Mr. Chairman: So you prefer judicial appeal. You also say that 4 per cent. royalty on food and chemicals is rather too small.

Prof. G. H. C. Bodenhausen: I don't say 'too small'. I say it is an arbitrary figure. It can be too high in some cases.

Mr. Chairman: So Government has drawn a *via media* and fixed it.

Prof. G. H. C. Bodenhausen: You cannot fix it once for all products.

Mr. Chairman: You would like it to be left to the parties?

Prof. G. H. C. Bodenhausen: In some cases it may be 1 per cent; and in some it may be 15 per cent. Both may be justified.

Mr. Chairman: So you would leave it to the parties to come to some agreement.

Another objection you raised is that the Government cannot import medicines royalty-free and you want royalty to be paid.

Prof. G. H. C. Bodenhausen: I think the proposed system will hamper industrialisation.

Mr. Chairman: If it is done in the interests of the public?

Prof. G. H. C. Bodenhausen: It depends where the interests of the public lie: 'no industrialisation and free importation'—is this in the public interest?

Mr. Chairman: Government hospitals are in the interests of the public. Some Governments have this power.

Prof. G. H. C. Bodenhausen: There is Sec. 48. I do not know of any parallel to that.

Mr. Chairman: After all Patent law is in the interests of the country where the law is made. It should be in all interests. You agree to that in your introduction.

Prof. G. H. C. Bodenhausen: Only I said that today it may be good for India, but not for ever.

Mr. Chairman: The country's industrial development and the stage of development, richness or poverty of the population—all these things had to be taken into consideration in enacting this law. You agree with that?

Prof. G. H. C. Bodenhausen: Of course, yes.

Shri R. Ramanathan Chettiar: In regard to the figures you quoted it will be better if I also add this....

Mr. Chairman: He does not dispute the figures.

Shri R. Ramanathan Chettiar: In 1962-63—Page 1387 of the Reserve Bank Annual Bulletin, November 1964—Pharmaceutical Industry: investment—Rs. 14 crores; Dividends remitted—2 crores and the royalties etc., Rs. 5 crores. So Rs. 7 crores was the profit on an investment of Rs. 14 crores and most of it is owned by foreigners in this country. Don't you think this is unconscionable?

Prof. G. H. C. Bodenhausen: I do not contest the figures

Shri R. Ramanathan Chettiar: Mr. Chairman was referring to comparative figures—1956-57 and the present time. Does he know this fact that fictitious profits are made by the Indian pharmaceutical industry under the present Patent Law. That abuse we want to put down. Naturally we want to tighten up the law. The more the number of years we give the more are the chances for the pharmaceutical interests to make more money and also establish cartels and monopolies.

Prof. G. H. C. Bodenhausen: Again I revert to my theme—whether the purpose is to kill only the tiger or all the animals?

Mr. Chairman: The main object of the Patent law is that research should be carried on in India and the manufacture should be done in India. But most of the Indian patentees import some intermediary from outside and finalise the product and label and sell it and make huge profits. Our Bill is designed to prevent such abuses. In the circumstances you have no objection to the provisions of compulsory licensing and licence of right that has been incorporated in the Bill?

Prof. G. H. C. Bodenhausen: I think they go too far. I don't object to the principle. That is necessary.

Shri R. Ramanathan Chettiar: Every other Patent law has such a provision.

Mr. Chairman: And your model law too. Then what is your objection for these provisions?

Prof. G. H. C. Bodenhausen: They go too far in many respects. First of all the compulsory licences are given without appeal to a court. That is one point that may be corrected. Licence of right particularly for pharmaceuticals is automatic.

Mr. Chairman: Naturally before granting a licence of right or compulsory licence Government makes an

investigation. The Drugs Controller makes an investigation and grants the licence after hearing the parties.

Prof. G. H. C. Bodenhausen: He is after all human. He can make errors too.

Mr. Chairman: So you want a right of appeal?

Prof. G. H. C. Bodenhausen: I think it is better to leave the final decision to the Judiciary.

Mr. Chairman: Thank you very much.

(The witness then withdrew).

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965

Friday, the 1st July, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

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4. Shri Ramchandra Vithal Bade.
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2. Shri B. N. Atrishi, O.S.D., Ministry of Industry.

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Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

National Foreign Trade Council Inc. 10, Rockefeller, Plaza, New York.

Spokesman

Mr Leonard J. Robbins.

National Foreign Trade Council
Rockefeller, Plaza, New York.

Spokesman

Mr. Leonard J. Robbins .

(The witness was called in and he took his seat)

Mr. Chairman: Mr. Robbins, whatever evidence you give here is public; it will be printed and distributed to the Members of this Committee as well as to all other Members of Parliament. If you want anything to be treated as confidential, even that may be distributed to the Members.

We have received your memorandum and also the latest statement you gave us last night. That has also been sent to the Members. Probably they had no time to go through it. If you want anything to be stressed upon, you can do so now. Please give us a short resume of the notes that you have submitted.

Mr. L. J. Robbins: Mr. Chairman and Members of this hon. Joint Committee, I should first like to apologize to you for presenting this typed State-

ment at such short notice before my appearance here, but there is a reason which I hope you will appreciate. When it was initially proposed, at the end of the last year that the American National Foreign Trade Council should request permission for me to appear before you, we were not at that time very familiar with the precise procedure of this Committee. As you know, we only presented a very brief and very generalized statement as to what our ideas were about this Bill. Also, I expected to be called in January or February and just make a verbal statement at rather short notice. In view of the subsequent postponement after the initial hearings, I was not certain whether I would be able to come, owing to other commitments, but there was time for me to prepare a written Statement possibly to be used as a substitute for personal appearance.

I should like to say that the National Foreign Trade Council gave me a very free hand. However, this text has been studied and reviewed by various committees and you will appreciate that there are various changes made. But I can say that this Statement

does represent a consensus of the American view point.

I do not propose to read this statement straight through, but I would like to emphasize certain points and elaborate on others. Also, during recent months, I have been able to collect a number of documents which I believe are significant, and which I hope you will find of interest. I have them here, and with your permission, I will refer to certain of these documents which I believe are of significance in connection with each of the sections of my Statement, and I will draw attention to certain passages. I propose to leave these documents with you, arranged in order, together with an index, for the Committee's records.

Those of you who may have read through the Statement will realise that certain sections are rather different from each other and have different approaches. Do you wish to put questions right at the end or do you wish to put them after each section?

Mr. Chairman: You may complete your statement; the questions will come afterwards.

Mr. L. J. Robbins: Very Well. I now come to the introduction. In the first paragraph, I naturally refer to my sponsorship by the American National Foreign Trade Council. I have here a report for the year 1963, and a program of the last annual convention and declaration of principles which indicate the vital interests of American business in international co-operation and the relevance of patent protection in this connection. There is a section in the declaration of principles relating to patent problems generally. I have been informed that 35 members of the Council—well known US Corporations—have actual manufacturing operations themselves in India in many fields. Some 20 have licensing and technical assistance arrangements with Indian firms and over 30 have extensive trade and service connections. I need hardly say that I am greatly honoured by

your invitation to appear before you, and I earnestly hope that the submissions that I make at this Hearing and the answers to questions you may put to me—based on some 35 years' experience in this field—will be of assistance to you in your deliberations on the Patents Bill of 1965.

I am here before you as an expert in the international patent field. I hope I can furnish any information you require concerning the past and the present patent laws and practices in all countries throughout the world. I can discuss the licensing of patents from the viewpoint of a lawyer who is naturally interested in obtaining the best terms for his clients. I feel sure you will understand that I do not have any expert knowledge in connection with the prices to the public of patented articles and materials. I merely become a member of the public in this area. I may buy something which is useful, but I may complain about prices from time to time, like everyone else.

However, in view of what I will say subsequently, I can venture the following two generalisations on a purely personal basis of conviction: (1) that patent monopolies and royalties based thereon play only a minor part in the price structure of the competitive market place and (2) that any special situations or temporary dislocations in India or any other country should be dealt with by appropriate and flexible regulations or decrees and not by imposing arbitrary restraints on the sensitive and unique operations of the patent system.

In view of the importance of patents in promoting technological development and the resulting effect on international relations, any changes in patent laws anywhere in the world are of major interest, and are followed closely, certainly in the United States and in Europe and elsewhere. However—this is something which I would like to emphasise—in all my experience, this is the first time that

so spontaneous a reaction has occurred and that business organisations from so many countries—from the United States, from Europe and from Japan—have requested permission to send representatives or to submit their views in writing to a Parliamentary Committee of a Sovereign State in connection with patent legislation. It is clear that the significance and implications of Patents Bill, 1965 extend far beyond the borders of India.

My own experience totally convinces me that a sound and generous patent system, with fair and reasonable safeguards of the public interest, is absolutely essential for the future growth of any country, whatever its status in the present industrial hierarchy. Please permit me to quote what can be regarded as unsolicited testimonials from three of America's greatest Presidents:—

Over 150 years ago, Thomas Jefferson, who was an inventor himself, said:

"The issue of patents for new discoveries has given a spring to invention beyond my conception."

Abraham Lincoln, also an inventor, said:

"The Patent System added the fuel of interest to the fire of genius."

30 years ago, Franklin D. Roosevelt said:

"The American Patent System has promoted countless applications of the arts and sciences to the needs and well-being of our people."

This is undoubtedly a very technical field. At this point, I should like to set out a few basic propositions which apply in India, even at the risk of stating what is familiar to you:

(i) Inventions must be distinguished from patentable inventions. Inventions have been made and re-

made from the dawn of history. The wheel was originally a patentable invention, if there had then been any patent law. Patentable inventions involve the modern legal concepts developed during the 19th century, of novelty, utility, inventive height, etc.

(ii) The best invention in the world can be ruined by an incompetent patent attorney. The protection against infringers afforded by a patent depends on the scope of its disclosure and the wording of its claims.

(iii) Patents are not things but legal concepts. They cannot all be treated alike by arbitrary rules.

(iv) The very rare pioneer patents create new industries. If they are not adequately worked by the patent owner, third parties can come in through compulsory licensing. Most patents are improvements which may or may not be of interest to competitors. Patents relating to unsuccessful inventions can be ignored; they are merely pieces of paper.

(v) Apart from the USA, West Germany and Japan, the majority of national patents are owned by foreigners. This, of course, is true in India. Why is this? The answer is very simple. The owner of a new invention must essentially be a gambler. It is something like putting on a new play in the theatre. It will be a success or a failure, but you do not know in advance. When a patent application has been filed in the inventor's home country, he must decide promptly whether to file abroad, even though he is still not certain that the invention will be profitable. The International Convention gives him a year. But in India, which does not yet belong to the Convention, any publicity or use in India would destroy the validity of patent rights. Therefore, many patents are obtained in India by foreigners purely as speculations. If they are not successful, they remain paper patents doing no harm and probably abandoned. If

they are useful and are not manufactured in India, then Indians already have the recourse of compulsory licensing, if they wish, under the present law.

I am aware that the Patents Bill, 1965 has been under preparation for several years past, and I do know something about the previous history of this whole proposal. The Bill, of course, demonstrates legal scholarship and sophistication. But in operation its practical effect would inevitably be to restrict, reduce and circumscribe the rights and activities of patentees in India—Indians as well as foreigners.

As a result, if Patents Bill, 1965, should be enacted into law, this law would be unique and far more drastic in overall effect than the patent law of any other country operating under free enterprise conditions, and would, I believe, have a detrimental effect on the Indian economy.

Those of you who have had an opportunity to glance through my Statement will see that I have arranged it in sections and proceeded from the specific to the general. I have included what I believe will be of interest to you including a special section on the U.S. Kefauver investigation.

I start with section 2 which deals with some specific provisions of the Bill. I am aware that a number of detailed and comprehensive analyses of the provisions of the Bill have already been prepared and will be submitted or have already been submitted by various Indian and foreign organisations. I wish to avoid any unnecessary repetition. So, I will only refer to just a few sections of the Bill which based on my own experience would be either ineffective as regards their avowed purpose or would be positively harmful to Indian interests.

Coming to product and process claims, (Chapter II, Clause 5) clause 5 attempts to define certain technical fields in which independent product claims will not be allowed, but only

process claims. I consider this actually to be an example of wishful thinking. The apparent prohibition could in practice be easily circumvented by skillful patent attorneys with the co-operation of the inventors while the strict application of this clause would cause enormous difficulties of administration and interpretation in the Indian Patent Office and undoubtedly would result in delays in prosecution.

Such a process limitation, at any rate in the field of chemicals, including pharmaceuticals and foodstuffs, is a 19th century concept in Europe, which arose when technical knowledge and social ideas were very different. It has now become quite academic. In certain countries, such as Germany, Holland, Switzerland and the Scandinavian countries, where the patent laws still do not permit independent chemical product claims *per se*, in actual practice very broad process claims are permitted, even covering conventional reactions, if the product is new and has advantageous and unexpected properties. The emphasis in these countries even though on the surface they only protect process claims, is to protect the product and, of course, in all these countries process claims do automatically protect the immediate product of the process. I say that a broad process claim can be really equivalent to an independent product claim.

It is highly significant that in recent years Great Britain, Australia, New Zealand and France and still more recently Ireland and the new country of Algeria, have switched over to independent broad product patent protection for chemicals and pharmaceuticals. Almost everywhere on the basis of informed legal commentaries and contemplated legislation, this can be regarded as the modern trend to facilitate the work of examining Patent Offices and Courts. I am sure you know that there is a proposal for a European patent. This may never come through, but it was based on the latest thinking which definitely permits inde-

pendent product claims. The same is true in Scandinavia where a proposal for a uniform law is under consideration.

If the chemistry indicates possible alternative routes to obtain a new product, the alert and skilled patent attorney together with the inventor will conduct sufficient experiments in the beginning to justify a broad process claim which will bar infringers. Furthermore, if the product is successful, the patentee is likely to explore all the chemistry involved ahead of competitors and obtain further supplementary patents when advisable. Therefore, I consider there is no basic difference but only a matter of degree between a product patent and a process patent.

Chapter II, clause 5, of the proposed Bill goes far beyond the law of any other country in applying this illusive restriction to fields outside chemistry—namely, alloys, optical glass, semi-conductors and intermetallic compounds. I believe this indicates some lack of technical appreciation by the drafters of the Patent Bill. For example, for many alloys, the only process involved is mixing and heating the ingredients. The invention resides in the combination of ingredients. Thus, process and product claims are actually identical in effect.

I would also point out that the technical border lines of these terms 'alloys', 'optical glass' etc. are so vague that arguments with a Patent Examiner as to whether a given case does or does not fall within Chapter II, clause 5, could be very difficult. Thus, while it is doubtful whether the restriction of the patentee to process claims will produce the desired result, there can be no question that the Patent Office would have a most difficult and frustrating experience in administering this provision.

In the exhibit here I would refer you particularly to item 7 where I have selected some German patents relating to alloys and optical glass. Germany

at present, as you know, does not permit independent chemical product claims. However, these two patents, which are typical, do have product claims. So, this clearly indicates that the highly skilled German Patent Office does not regard alloys and optical glass as being result of chemical reactions. This is a most difficult field in the present knowledge of atomic and molecular structure and it would be most unfair to the Indian Patent Office to make it state that a given alloy or glass invention involves a chemical reaction or a physical mixture. The same applies to intermetallic compounds. So, I consider that the proposed restriction in this field is entirely artificial. For your general information as regards what I said about the effect of broad process claims I have in the Exhibits some examples of Indian patents which have already been granted with some extremely broad process claims which would in practice operate just as broadly as product claims. So, it is possible in India now under the present system to do this. I have a chart here prepared in my office to show just what the situation is as regards product and process claims in all countries throughout the world and that I think is the latest information in this field.

We now come to the sections relating to compulsory licensing and licences of rights—Chapter XVI, clauses 87, 88, 89, 95, 96, 97 etc. It is true that in the early years of the 19th century many countries provided for outright revocation of non-worked patents. This was finally considered unjust and impractical and compulsory licensing was proposed as a more equitable and less drastic alternative. The laws of most major countries now provide for compulsory licensing of patents in general (that is, the grant of licenses to approved applicants on suitable terms after Patent Office or Court investigation) after three years from grant, in conformity with the provisions of the International Convention. A few countries, such as

Great Britain, also provide for compulsory licensing of patents for drugs and foodstuffs without any period of delay after grant.

I think you know that the United States does not have any provision as regards working and compulsory licensing in the patent statute, but owing to the different approach in America as regards anti-trust measures and decisions of courts, it is probably true that more American patents are subject to compulsory licence than anywhere else in the world.

The history of statutory compulsory licensing since the beginning of the 20th century is highly significant. Very few compulsory licences have been applied for anywhere. The broad general explanation is that a successful invention is fully exploited by the patentee at a reasonable price to the public and that an unsuccessful invention dies. Intermediate situations are dealt with by voluntary licensing, as a much preferred alternative to the official intervention of compulsory licensing procedures.

At the present time, no country anywhere has fixed any ceiling for royalties under a compulsory licence, but leaves this to negotiation between the parties involved and the appointed authorities, with the right of appeal in the event of disputes. Inventors and industry, throughout the world, have lived and survived with the mild and consistent compulsory licensing provisions of countries which broadly adhere to the International Convention.

I would like to emphasize the next two statements on page 4. The provisions of Indian Patents Bill 1965 are so drastic in respect of compulsory licensing, in comparison with the laws of all other countries, that they are detrimental to Indian interests from every aspect.

Consider, for example, the situation of an American company originating a

successful invention and have worldwide patent protection, including India, and willing to invest capital abroad to manufacture the product. It seems obvious that a manufacturing plant would not be established in India if the American company could be compelled to grant a low royalty licence to any and all competitors.

Also, and I would emphasize this, consider the situation of Indian industry itself—assuming, as everyone hopes, that this will expand and that domestic Indian research and development will become an important factor of the economy. Under the compulsory licensing provisions of the Bill an Indian company could in effect appropriate the inventions of its competitors, whether they were Indian or foreign. Indian industry, in certain fields, may not be concerned with this at the present moment, but in the future this could be most harmful to commercial initiative. Furthermore, the possibility of compulsory licences to import products would actually favour foreign over domestic Indian industry.

In connection with this brief statement on compulsory licensing I would very definitely refer you to these Exhibits particularly. There is a most interesting report prepared for the American Congress—the 85th Congress. It was entitled, "Compulsory Licensing of Patents under some non-American systems". This was prepared by a very well known Swedish lawyer who was intimately connected with the problem all over the world. I would draw your attention to the conclusion—the implication is that if you push too hard in this field, you may kill the goose that lays the golden eggs—

"The dissatisfied inventor will pass over into the area of trade secrets, cease publishing the results of his intellectual research, which if known and available will be useful in further development, or simply stop inventing. Public interest in patent matters, there-

fore, can never neglect the interest of the new inventors without defeating its own purpose."

The very first proposal for compulsory licensing, surprisingly enough, was made in the United States. For the last 50 or 60 years there have been many, many proposals for compulsory licensing in America, but they have not succeeded because, as I said, there is a different viewpoint with regard to anti-trust.

The Exhibits include a highly interesting list of reported cases on compulsory licensing in both Great Britain and Canada during the last six years and you will see how very few controversies and requests for licences have arisen in these very typical countries.

I have also included a copy of a recent decision in England, which may not be available to you, which denies compulsory licences for importation of a pharmaceutical product and I submit that this decision should be carefully studied. It is by a well known and a highly respected senior hearing officer in the British Patent Office and refers to the possible results of weakening the patent law by permitting importation of patented products from abroad.

I come now to the provisions about Government use of inventions, that is, Chapter VIII, Clause 48, Chapter XII, Clause 66, Chapter XVII etc. The laws of, I think, practically all countries, as in India at the present time, do provide for Government use of inventions for military purposes and in time of emergency. This is considered absolutely legitimate, but in recent years this relatively clearcut proposition has been complicated, it is true, by various countries in which there is socialised medical legislation. In Great Britain, the House of Lords, in a very important decision only last year, did construe the British Patents Act to enable the Government, in the operation of the National Health Scheme, to make unlicensed use of imported

patented products, of course subject to compensation. However, in spite of this decision, I am reliably informed that the British Ministry of Health has elected not to import any more but has preferred to resume obtaining its medical supplies from local production. There are a number of reasons for this decision by the British authorities. Partly it involves the question of keeping up the quality of the product. When there is an imported product, it may not be possible to control the vitally necessary quality of the product. I will come to this question of importation later.

The powers granted to the Indian Government in the Patents Bill 1965 are so sweeping, particularly in connection with clauses 48 and 102, that it is quite unlikely that any foreign owner of an important invention would actually apply for patent protection in India at all. It seems much more likely that any operation in India, either by direct investment or by a licensing arrangement, would be based on secret know-how. I would point out that secret know-how would be outside the provisions of the patent law. Of course, these days anything based on secrecy is to be deplored. It is unscientific and it does not benefit the public.

The next of these comments is on special provisions involving examination in the Patent Office, that is, Chapter III, Clause 8 and Chapter IV, Clause 13. An applicant is expected, under the provisions of this Bill, to furnish particulars of all other corresponding foreign applications. I would point out that at the present time—and, of course, probably for some time in the future—the preponderance of applications will be owned by foreigners. There are well over 100 countries having patent laws and many important inventions are widely filed. In view of international trade that is now becoming essential. I can assure you that it would be a clerical task of most appalling proportions for a busy patent department of a large corporation, say,

in the United States or in Europe, handling thousands of pending patent applications all over the world, to compile the information called for under Clause 8 and forward it to India within eight weeks.

I would point out it is quite uncertain what the Indian Patent Office would then do. Clause 8(2) is permissive. The Controller may call for particulars of prosecution of any or all other foreign applications. But foreign examination practices, and novelty and patentability requirements, are extremely variable and in many countries quite different from those of the Indian Patent Office. For example, the average official action in the United States or Germany would result in arguments and amendments based on legal principles not present in the Indian Patent Law. Also in many foreign Patent Offices it may take several years before even a first official action is issued. If the Indian Patent Office invoked Clause 8(2), it would receive an erratic flood of material which it would find either difficult or impossible to digest.

If you will refer to page 5, I refer specifically to the situation now in Canada and also in various other Scandinavian countries and Holland. In the Exhibits I have some examples of what they do require. But I would emphasize that in these countries, the requirement of furnishing information is permissive and voluntary. Some applicants may occasionally furnish information if it is convenient to them. There is absolutely no penalty in any of these countries for not furnishing information of what is done elsewhere.

Clause 13, Chapter IV, provides for a novelty search of publications not only in India but elsewhere also, that is, throughout the world. I submit the Indian Patent Office has no library facilities for such searching. Even in Great Britain the search is confined to domestic publications. It is only a very few highly industrialised countries that provide for world-wide

novelty. It is also notorious that the quality of searching even in these countries is becoming very poor owing to the vast increase of the technical literature in recent years.

I refer now very briefly to the Right of Appeal, Chapter XIX, Clause 116. This Bill positively and severely restricts the right of appeal from Patent Office decisions and decisions of the Central Government, to higher tribunals or to the Courts. I could say much more on this point but I do not feel that this is a matter on which outsiders should go very far. I consider this as a matter for the Indian legal profession. I may point out that about a year ago in Washington I had the honour of meeting a number of Indian Judges. I feel quite sure that if this restriction of the fundamental right of appeal is enacted into law, it ought to be a matter of very great concern for the legal profession and judiciary in India.

I would now like to refer in more detail to the general effect of a law based on this Bill on the future functioning of the Indian Patent Office. I consider this as most important from the practical viewpoint.

With your permission, I may point out that I visited the Indian Patent Office in Calcutta in 1953 and met many officials and members of the examining staff. I was greatly impressed by their dedication, hard work and, at that time, their concern about the efficient operation even under an increasing work load. A decade later, it is generally conceded that the Indian Patent Office, as it stands now under the present law, has serious difficulties in carrying out the relatively mild provisions of the existing patent law. I can state quite categorically that the Indian Patent Office, as it is at present constituted and organised, would not be able to administer a new patent law based on this Bill. This would be true even if the present number of patent applications filed per year does not increase. But, as you know, in all

other countries, the number of patent applications is increasing. There is no doubt that it will increase in India also. The efficient administration of clause 8 and clause 13, irrespective of all the other clauses, would call for a large number of highly skilled examiners, familiar with the patent laws and practice of other countries and at any rate conversant with several European languages to enable them to search the technical foreign literature. It would take many years to train such an elite examining corps. I ask: Is the personnel available? Apparently, many odd situations would arise. The Patent Office would have to compete for technically qualified manpower with the industry it is intended to serve—just at a time when industrial expansion in India will produce a shortage.

Obviously, to carry out the potential requirements of the proposed new patent law, the Indian Government would have to budget for very substantial increases in staff and office space. Would this be justified? If even some of the submissions presented in the present statement, contentious as they may now appear, should turn out to be correct, there might actually be a decline in the number of patent applications filed by both Indians and foreigners, contrary to the normal trend.

Whatever the underlying objectives and reasons may be for the preparation of Patents Bill, 1965, I feel convinced that the legislature as a whole, irrespective of economic or social pressures which may be responsible for some of these provisions, is not yet aware of the purely practical problems the Indian Patent Office would face. There would be no point in enacting a law which could lead either to administrative chaos or to stagnation.

I can well understand that the officials of the Patent Office who are very devoted public officials, would have great hesitation, obviously, in criticising a Patent Bill, which might be regarded as serving their own interests.

This problem of the Indian Patent Office can, I think, best be presented from the outside on the basis of a comparative evaluation of what is going on in other patent offices all over the world.

Now I come to Section 4, i.e., the effect of this Bill in certain specialized technical fields. This Bill, of course, would affect patent rights in general but would have very special impact in certain technical fields in which very intensive research is essential for progress, unless human nature in India has become entirely altruistic. These fields include, of course, pharmaceuticals and foodstuffs in particular. All governments throughout the world are concerned with public health and availability of essential drugs and foodstuffs, but the basic issues are the same in all countries, whatever their size, population and the stage of industrial development.

Possibly the drafters of this Bill hope that the result of their efforts will be to provide freedom of action to the public and private sectors of the Indian Pharmaceutical Industry to furnish drugs and foodstuffs to the Indian public at the lowest possible prices. But, I say, gentlemen, that there are no valid and rational arguments that would indicate fulfilment of such a hope. It is far more likely that foreign applicants, now responsible for over 80 per cent of the Indian applications, would gradually find the restrictions too difficult, too onerous, in this highly difficult and technical field and might even bypass India entirely and refrain from filing on new inventions in this field. At the present stage of Indian domestic research, this means that Indian manufacturers might actually have to appropriate and use inventions made abroad which are the legitimate property of others.

I respectfully submit that this Committee should most carefully consider the Italian pharmaceutical situation in all its aspects. I am sure you are aware of it in general, but there are

many particular aspects that are not so well known. It is, of course, a unique situation that the Italians do not grant any type of patents for pharmaceuticals. I will not now explain the reason why this has occurred, but let us treat it as a fact. After the War, the Italian industry did indeed copy many important drugs originating in the United States and Europe. The theory, of course, was that the Italian industry had been so much damaged by the War that this was the only way they could keep the industry going. The industry became quite competent and aided by the publications of foreign inventions did begin to develop its own knowhow. I have referred here in the Exhibits to a situation that you may be aware of that certain Italian firms, in recent years, not only copied but actually stole technical information and even physical organisms that were used in producing antibiotics.

The fact that there are no patents granted on pharmaceuticals in Italy has not led to any great benefit to the Italian public. I can assure you that the prices of pharmaceuticals in Italy are at least as high as, if not higher than, those in other countries and for any given drug, there may be 20 or 30 different products on the market, all under different names, so that the emphasis is on advertising. Owing to the great cost of advertising, each of these 20 or 30 companies fight one another. It has become, I can only say, a ridiculous situation and that is now apparent to the Italian pharmaceutical industry and partly as a result of this and partly due to the Italian entry into the Common Market, it is highly probable that the Italians will enact a pharmaceutical patent law comparable to that in other countries. In other words, having been in a unique situation for many years, Italy may now join with the rest of the world in handling pharmaceutical inventions.

You are, of course, aware that, during the last generation, a medical

resolution has occurred particularly owing to the discovery of sulfa drugs and antibiotics. But in countries having strong patent systems, competition has actually been intense due to the stimulation of research. If in certain instances and at certain times, costs to the patient may appear to be high, this is not due to the existence of patents, but to research costs. Alleged unsatisfactory or inappropriate commercial practices in any country should be controlled by government by suitable regulations.

I would again say that the patent system is not the correct system to apply restrictions against commercial practices. I say that this is true in India and I say that the Legislature should look forward into the future and not consider merely the present situation and I would emphasize that the nature of medical research is changing very rapidly everywhere. A great deal is being conducted by Universities and Foundations, intimately tied up with biology, physics, chemistry and what is known as the group of "life sciences"; there is pure research and there is applied research. Startling discoveries will undoubtedly be made, which will become available to everybody. The initial patent protection is the price you must necessarily pay to encourage this research. It is only of limited duration and after that, the results of these discoveries will be available to all mankind permanently without any patents being involved.

The next Section, on the Kefauver investigation, I believe, will be considered by you as of considerable importance because there has been so much of misunderstanding about the Kefauver investigation. Senator Kefauver, many years ago, started an investigation through his subcommittee of the Judiciary Committee to investigate what he called "administered prices", i.e., prices he did not consider the result of the natural operation of commercial market conditions. He first of all investigated automobile

industry prices; he then investigated the baking industry and then some other industries. It was, more or less by accident that he finally got down to investigate the pharmaceutical industry. Before going into this discussion, I want to point out the result. I am sure you will understand that, since Senator Kefauver was the Chairman of his Sub-Committee, his political Party was in power. After years of investigation—I think you have the full Kefauver Committee Report available—his own Party disagreed with him. The net result on the patent laws of America was absolutely negligible and the practical result was nothing. Senator Kefauver tried to do in a way what this Indian Patent Bill is aiming at—I would not say wholly because American law is different—but he was trying to use the patent law to control prices of drugs. As I said, the net result was zero. The main result of Kefauver's investigation was in an entirely different field which the pharmaceutical industry in America welcomed. That was somewhat stricter investigation of the quality of drugs and of their effect, because most of the manufacturers in America felt that this was a way of keeping the marginal producers in this highly competitive field in line. So, I would just emphasize—I will not go into all the details—that the net result of the whole Kefauver Investigation was that the Patent Law itself was merely modified in completely negligible directions and there was no restriction on the terms of patents and no restriction on licence royalties. Whatever they were, his proposals were considered totally impracticable. I am sure that many of you will read what I have written here at the beginning of page 8.

I will, if I may, just read from the last paragraph. 'After extensive hearing the Kefauver Sub-committee Report was issued on June 27, 1961.' If you will read it carefully, you will also see that 'it bears every evidence of the most hurried preparation and very crude distortion of facts.' I

would point out that Senator Kefauver, though I am sure his basic ideas were to protect the public interest, was a politician with presidential ambitions. He was a very, very skilful publicist and much of his sensational statements, many of them totally wrong, were, released early in the afternoon so that they would just catch the afternoon newspapers and make very large headlines. "Few people seem to know that there was a very vigorous minority report by Senators Dirksen and Hruska which begins with the words "The majority's views in the report on administered prices in drugs do little credit to the Subcommittee for there is no attempt whatsoever to be objective and constructive through judicious evaluation of all the testimony and exhibits'. It also states "There has been a general confusion on the subject of patents, which pervades the majority's report on process patents versus product patents'. I can personally testify to this because the Kefauver Report has quoted a single paragraph from a very innocuous informational article I had written many years ago entitled 'Pharmaceutical Patents in Foreign Countries' to imply that certain countries do not grant patents for new pharmaceutical products. However, the Dirksen Minority Report points out:

'Any careful review of the comments made in the majority's report as contrasted with the text shown above indicated that there is a completely different concept of patent protection abroad than the report attempts to convey.'

Then they refer to subsequent statements I made that record exactly the opposite impression.

Shri R. P. Sinha: You were responsible for providing that motive.

Mr. L. J. Robbins: I was not responsible. Senator Dirksen picked it up himself. This was a very old paper I had written. They found it themselves.

There was a very great gathering criticism of the whole Kefauver Investigation, but in spite of this he introduced Bill S1552 in the United States Senate and I hope this Committee will study this Bill in connection with what you are proposing to do here.

Now, this Bill was actually in three parts. It affected three different United States Laws—the Sherman Antitrust Act, the Patent Act, and the Food, Drug and Cosmetic Act. You can ignore the proposed Sherman Act revision as it is in a specialised region that does not affect the Indian Patent law at all.

The proposed US Patent Act revision was drastic, and here if I may, I will read from my Statement in view of some of the parallel provisions proposed in the Indian Patents Bill. One provision would have prohibited grant of patents for molecular modification or new combinations of existing drugs unless it was determined that the therapeutic effect is significantly greater than that of the original drug so modified or combined. Another provision proposed to reduce the exclusive term of a drug patent to 3 years, after which it would be available for licensing to any qualified third party (for the next 14 years) for a royalty not exceeding 8 per cent per annum. Such compulsory licensing would also require the disclosure of the original applicant's know-how.

The Federal Drug and Cosmetic Act provisions were numerous and I do not think we really need to be concerned with these here in discussion of your Patents Bill, but they were the ones to which the Pharmaceutical Industry in America was quite sympathetic.

There was very little comment on the very specialised revision of the Sherman Act. However, the patent provisions were strongly objected to by all sectors of the industry, by economists and patent experts. I will

refer in a minute to these exhibits I have here which I do hope will be read by many of you.

After all this, the Kefauver Bill went through the legislative machinery of the United States Congress. I would point out that the Kefauver Antitrust Sub-committee was merely one of several Sub-committees of the main Judiciary committee. In accordance with the usual procedure these provisions were referred back to the Patents Sub-committee. Now, this Committee held its own hearings, reviewed the matter thoroughly, talked to many experts and then it disapproved the drastic and controversial patent provisions. This disapproval was confirmed by the main Judiciary Committee in the final Bill which was actually submitted to the Congress.

The only legislation that was then finally enacted in the field of Patents, as a result of the whole Kefauver investigation extending over many years, and which was signed in due course by President Kennedy, are two minor and limited statutes. I will not read them in detail because you will have the text here in the Exhibits. One provided for recordal of patent interference settlements in the Patent Office. You do not have interference practice here, so it should be ignored. The other amendment was to enable the U.S. Patent Office to call on the Secretary of Health to furnish technical information concerning drugs if he wishes to do so. In actual practice there have been very few instances of requests as the Patent Office has its own qualified examiners.

About these Exhibits here, you have not yet got, I think, a copy of this list, but it will be available to you. I am referring you to the main Kefauver report to the U.S. Senate. I would refer most strongly to pages 105 to 154 which deal with patents and research relating to drugs. And I would point out as an illustration of the many misleading statements in

the whole Kefauver investigation, that on pages 106 and 112 there are totally incorrect statements relating to India itself. I would also refer you to point 3 of the minority report beginning on page 138.

Of these Exhibits, number 4, entitled "Prescription drugs and the public health" is a digest and summary of the complete presentation of the Pharmaceutical Manufacturers Association in America. And there is very interesting testimony from Prof. Rostow and Mr. George Frost, a well-known American Patent lawyer. I may point out that it was originally proposed at the end of last year that Mr. Frost, who was actually a witness before the Kefauver Committee in this field, should come over here because he had the most expert knowledge of the whole proceedings and would have been able to answer any of your questions. But Mr. Frost has just been appointed Patent Counsel of General Motors Corporation and his new duties made it impossible for him to come over here. But Mr. Frost made available all his files to me and I spent many hours with him talking over what we considered the key points. So even though I can't pretend to be an expert on the Kefauver investigation, I think I have a certain amount of general information and can refer you to the particular things of interest to you. I may for the record refer now to exhibit No. 5 which is called "Legislative Analysis." This is a fairly brief pamphlet which gives a complete summary of the legislative results of the Kefauver hearings. I would draw your attention particularly to these passages—the summary on page 1, the introduction on page 4, and the digest on page 6. All these are quite brief. I would refer you to part 1 entitled "Competitive Structure of the Pharmaceutical Industry" on pages 7 to 23. I would refer you to part 2, "The Nature of Ethical Competition" on pages 27 to 47. I would refer you to part 4, "The Patent Code Amendment", on pages 55 to 64, and part 5, "The Food and Drug Amend-

ment" on page 68. All of those, I think, are well worth your consideration. I also refer you to item No. 6; this is unofficial but is a complete comparison of the Kefauver Bill—the Senate Bill S1552 introduced by Senator Kefauver with all its ramifications—and the Bills S1552 as finally enacted. It must be said that the mountain laboured and brought forth a mouse; the final patent revisions are of completely minor significance. These are the Kefauver Exhibits. I leave with you and which will, I hope, be of interest to you.

I now turn, Mr. Chairman and gentlemen, to Section 6 entitled "Recent World-wide Developments Affecting Patents." I believe that all the following specific foreign developments have a bearing, in their different ways, on the general Indian patent situation, and I submit that each of them and all of them are reasons why the Indian Parliament should not take precipitate action in this field in a direction which, I believe, is contrary to the world-wide trends in this field.

First, there is a new concept in patent law which has recently been introduced. Actually, I believe the origin was in France, very surprisingly. Now, as you know most major industrial countries long ago incorporated examination procedures as distinguished from simple registration. France and Italy and some other countries are exceptions, but all the others in Europe and the United States, and Japan and countries elsewhere in the world and, of course, including India, examine patent applications the reason being to try and get a reasonable presumption of the validity of the claims instead of having claims put in by the applicants which are far too broad so that it is very difficult to determine what the scope is. I would say, in general, the strictness of the examination in any given country is a measure of its industrial development. The purpose is to issue only patents of reasonably certain and well-defined scope. But the rising

side of invention everywhere has begun to swamp patent offices, and in practice serious backlogs have developed and the quality of the examination has declined. And I think top officials in the Indian patent office are well aware of this problem.

Now as a solution to this, what is called "deferred examination" has been proposed. This means in essence that a patent application is filed and assuming it is in formal order, it is published quickly; when I say 'quickly', I mean, within 18 months or two years. Now it is considered that early publication is a great benefit to industry and to everybody concerned and that a great delay before a new invention is published is not a good thing. But the idea is that the actual technical examination in the patent office should be deferred at the option of the applicant or at the option of third parties. As you know, it often takes four or five years in any case before an invention is commercially developed. It is a great waste of time in patent offices to examine every application because ultimately so many of them fall by the wayside. So, it is much better to examine only those which are likely to be important inventions.

This proposal gives any applicant the option to request that his application's examination should be deferred by say some 5 to 7 years. On the other hand, since it has been published some parties may be interested in this very field and wish to be quite certain of the scope of this invention. So the idea is that the third party can come in and also request examination. But the general proposition is that the burden on the Patent Office is relieved, because it does not have to examine every case and if a given application has not been examined at the end of this 5 or 7 years term, then it is just considered as abandoned. If no request has been made, it is not considered of interest and it is assumed that the applicant is not interested and third parties are not interested, so that the

Patent Office has not had to waste its time to give consideration to this case. This is a totally new idea in recent years. It has met with some criticism, as new ideas are generally met with criticism. But I would say, generally the merits of this idea are beginning to be appreciated. Holland is the only country that has as yet adopted this, actually in practice, and there were among members of the Dutch Patent profession grave doubts whether it would work. I have consulted them and also the President of the Dutch Patent Office. It can now be said that upto the moment, it is working satisfactorily and it has cut down the burden on the Dutch Patent Office by something like over 60 per cent. Now under such deferred examination procedure, many other benefits might arise which have not yet been explored. These statistics are not yet very accurate but the Dutch experiment is being closely watched elsewhere in the world. A Bill has actually been introduced into the German Parliament for deferred examination in Germany. That, of course, would be a major step which should have influence all over the world. It has been proposed in Australia also. Now I do not suggest, of course, that this Committee should study this proposal in detail, but I do submit that this is something which is being considered elsewhere in the world as a solution to a very grave problem in Patent Office operation.

The next section relates to Harmonization of Patent Laws. This is something which is going on very quietly particularly in Europe. As you know, in Europe, the Common Market authorities proposed the entirely new concept of a single European Patent. The actual text was prepared but for various political reasons and other reasons and partly due to the enormous complexity of this proposal, it has not gone through and personally I think I am correct in saying there are considerable doubts as to whether it ever will be enacted. The inter-

nal and external problems of this proposal have not been solved. There is the question whether outsiders not in the Common Market should be invited. That is not relevant to this particular session here. Many experts and industrialists consider that harmonisation of the national patent laws is a far more simple and practical approach and in any event would be an essential preliminary to any multi-national operations. This harmonisation movement is proceeding quietly in Europe, and among the exhibits I have here are the texts of two Treaties that have been enacted—one making formalities in the countries the same and the other relating to substantive law to unify legal concepts. I merely mention these things to indicate that there are worldwide trends in the Patent field at the present time and this Indian proposal is so specifically contrary to these worldwide trends that I feel I should draw these general considerations to your attention.

I would refer now to the International Convention. Chapter XXII of your Patents Bill indicates that India may in the future wish to join the International Convention. India is free to join International Convention at any moment. Any country can join merely on request, but the provision of your Bill are so contrary to the provisions of the International Convention that it would be a very anomalous situation. The International Convention now has some 80 or more countries and I would point out that Russia recently joined and a very interesting publication which is available here in the Exhibits discusses the Russian Patent Law in relation to the International Convention. Surprisingly it finds that the Russian Patent Law is not contrary in many respects to the provisions of the International Convention. The main provision in the patent field of the Convention is the one year priority provision. That of course from the practical point of view is most important. When Indian industry develops and you have many domestic in-

ventions made, as I am certain it will happen, that provision of the International Convention would be of vital importance because otherwise your inventors would have to hurry and rush, as I pointed out, to file in other countries before publication. There are certain South American countries that are not yet members of the International Convention. In my own practice in America, it is often a great problem making a decision—should this case be filed, immediately or should the member take a chance and wait. The provisions of the International Convention constitute a minimum set of rules, apart from the priority provision, about compulsory licensing, national treatment, and so forth. The adhering countries bind themselves to adopt them. That does not necessarily mean they actually do carry out these provisions, because in most countries even when an international treaty has been signed and ratified, domestic legislation is necessary to effectuate the provisions of the treaty. I might point out that for many years, although France in a way was the home of the International Convention, going back to 1883 and known as the Paris Convention, France did not have any compulsory licensing provisions until about 10 years ago. All that time, France invalidated a Patent if it was not worked, after litigation by request of third parties. Italy, a long time member of the International Convention—almost from the beginning—still does not have compulsory licensing provisions. A patent in Italy will be revoked if it is not worked, if a third party objects and brings suit on that ground. There are anomalies. If an Indian law were to be enacted based on this Bill, this would not prevent India becoming a member of the International Convention, but it would cause a very much more anomalous situation because the provisions in India under a Patent Act based on this Bill would be so contrary to what would amount to your commitments under an international treaty.

The next point is about the BIRPI Model Law that has been drafted on which you have already heard evidence. An Indian representative was present at the discussions of the Model Law before it was adopted, I think, your Controller General of Patents. So, it is rather anomalous that the Bill as presented should contain provisions which are totally different from those of the Model Law.

I am convinced myself that in a country where the economy is developing rather than highly industrialised, the provision of Patents of Confirmation is extremely useful, and that, of course, is one of the optional sections proposed in the Model Law. It takes many years for an invention to be developed practically. Foreign patentees would come to India, and obtain a patent for something which was already a practical, useful invention. Of course, Patents of Confirmation would be subject to compulsory licensing if not in actual production in the country like any other patents. I would recommend a study of the benefits of Patents of Confirmation which are adopted in some countries at present, particularly in South America, and I believe that the comments of BIRPI on Patents of Confirmation are well worth consideration.

In the United States, I can assure you we do have our own patent problems. As you know, the U.S. law is very different from other countries as regards claim practice and patentability. The backlog in the U.S. Patent Office has increased, and industry is gravely concerned by the potential consequences. There have been many proposals for amendment. In April, 1965, President Johnson appointed a Commission to study all aspects of the patent system and recommend appropriate changes. The American Patent Law Association established a special committee to study this, of which I am a member, to advise and report to the Presidential Commission, and many proposals are under very intensive study. It is

far too early yet to say whether these proposals will be favourably received, but many of these proposals are quite radical and drastic, and there is quite a possibility that ultimately the U.S. law will be amended and brought into much greater conformity with the laws of other countries. It is definitely true that a change in the American patents system would be of great interest all over the world. I would suggest that possibly India might wait and see what happens in the United States and other countries also before proceeding with this very different, specific, drastic legislation.

I now come to my general conclusions. There is a ferment in this whole patent field all over the world. It is not peculiar to India alone. On top of this there is the general idea of international co-operation. Duplication of effort of patent offices in examining and re-examining the same invention in different countries is admittedly waste of time. You probably know that there is already in existence an international institution at the Hague which uses the remarkable facilities of the Dutch Patent Office Library, and there a very excellent examination can be made. There is a proposal that patent offices all over the world, including even the U.S. Patent Office, may begin to use these facilities, in other words have a centralised examination system to avoid duplication. This is one of the proposals.

Some time back at the World Peace and Law Conference held in Washington, they surprisingly introduced an industrial property section, indicating how important it is from the world point of view, and since this was a very general meeting, I spoke about what might be the patent situation in the world in the year 2,000 A.D. It is all speculation and nobody can prove me right or wrong, and I indicated there might even be an international satellite for exchange of information by patent offices all over the world. It is quite possible.

I would emphasize that because of the very technical nature of the patent field, it is usually quite difficult to get the attention of Parliaments to patent legislation, and when comprehensive changes are made, they are likely to remain for a very long period. The present Indian Patent Law has been in force for over 50 years apart from certain specific amendments. It would be most unfortunate if a new patent law should be enacted, which is quite different from that of other countries, and which might remain in effect for a long period. I feel that this might even hinder India in its struggle to take its deserved place as one of the world's largest markets.

At the present time, India does not have sufficient capital resources of its own to finance all the industrial expansion and investment that is needed to maintain the necessary rate of growth in all sectors of the country. No one can predict how the restrictions on patent rights—they are very definite restrictions—in this Bill would hamper the future flow of investment capital. I am being followed by Prof. Kilbridge tomorrow. He is an expert economist and he will be able to deal with those aspects.

American capital has many competing regions of interest. As an analogy, I would refer to an article in *Chemical and Engineering News* of November 15, 1965, entitled "Low Capital Spending Mars Italy's Economy". A quotation reads:

"U.S. chemical firms are slowing down their Capital outlays in Italy this year. U.S. dollars are skirting Italy in favour of West Germany and the Low Countries."

The general climate for foreign investment is complex and depends on many factors. I want to point out that Mr. Nehru himself, in his book "Nehru: the First Sixty Years", has said that "I do not think it is possible for India to be really indepen-

dent unless she is a technically advanced country. I am not thinking for the moment in terms of just armies but rather of scientific growth."

I submit that if certain conditions now in any specific industry here in your country are of concern to the Government, it would seem that suitable specific legislation or regulations should be or are available, to control or ameliorate them without attacking or debasing the patent system, a system which is really the handmaiden of scientific growth.

May I very respectfully urge that the Patents Bill should be further studied in the light of what other countries have found to be a very satisfactory procedure. When important new legislation is contemplated, I would suggest that the Government might appoint a Special Commission, a Commission of prominent citizens from all sections of the community, to study the true interests of industry and the public under the patent system and then make appropriate recommendations after considering developments in other countries.

I can refer to England, Canada and the United States and their Commissions, for example. In conclusion, I would say that the best patent laws are indeed the simplest ones, and not the complex ones, as has been very well proved by what is going on now with the revisions that are being made and proposed in other countries.

In connection with this conclusion of my Statement, I would finally refer you to the Exhibits here. I hope you will read them. The first one is a copy of a memorandum which one of my partners submitted to Mr. Modawal of the Ministry of Commerce in connection with Registered User practice under the Indian Trade and Merchandise Marks Act, 1958. The comments on page 1 relate to an air of suspicion and to the severity of requirements and formalities which do not exist elsewhere in the world. I say that the unfortunate air of sus-

pcion is relevant to the present situation and the provisions in this Bill.

I would also refer to the Canadian Royal Commission Report. It is true that the Canadian patent law has not yet been amended for various political and other reasons, but the Royal Commission conducted most comprehensive hearings; I was a witness before them and if you refer to page 23 of the Report, you will find that one of my proposals was very favourably considered by the Commission.

I have some documents here relating to one of your famous scientists, Dr. Yellapragada Subba Row and the recently established Subba Row Memorial Library in America. There have been many famous Indian scientists of world-wide fame, such as Dr. R. C. Bose, Prof. Raman, Dr. Chandrashankhar, and Dr. Bhabha who unfortunately was tragically killed recently. I wish to speak of one, whom I had the honour of meeting—Dr. Subba Row, who was the Director of Research of the Lederle Laboratories Division of American Cyanamid until his untimely death in 1948, and who was also a friend and associate of Mr. R. Norris, President of the National Foreign Trade Council. Among his many achievements, Dr. Subba Row first synthesized the B¹² vitamin folic acid and he was largely responsible for the discovery by Dr. B. Duggar of the first broad spectrum antibiotic chlorotetracycline known as Aureomycin. I personally handled the filing of patents on both these developments throughout the world and I will know that Dr. Subba Row was an enthusiastic supporter of the patent system, without which the dramatic results achieved by Lederle and other pharmaceutical manufacturers would not have been possible.

I may also suggest that this Committee should most actively enlist the interests of the Indian scientific community in patents generally and in the proposed new patent legislation. I am certain that they will confirm that Indian research and foreign in-

vestment must go hand in hand and that both will depend on a fair and equitable patent law. Thank you.

Dr. C. B. Singh: We are very grateful for your views, Mr. Robbins. But I am sorry that you are not an expert as far as the prices of these commodities are concerned, an aspect with which we are most concerned. But I would like you to give a reply to one question. Is there any widespread complaint about the price structure, the claims of firms, about the quality and the methods of advertisement, in respect of the pharmaceutical products in America at the moment?

Mr. L. J. Robbins: I would not say there was any widespread complaint. But over the years, in any industry, there are always specific complaints going on by certain people, as to what certain people are doing and what certain manufacturers are doing. It is common all the time. As you know, the US Government has recently appointed a new director, Dr. Goddard of the FDA, and he is very much tightening up. But what he is doing in the field of quality and advertisement.

Dr. C. B. Singh: I was referring to the first speech of Dr. Goddard. He has complained very bitterly about these things, and he has given a warning to the pharmacists. Do you agree with that?

Mr. L. J. Robbins: As you know, he has only recently been appointed, and I think you know that new brooms can sweep clean. He is very vigorous at the moment, but whether what he asserts is justified is far too early to say.

Dr. C. B. Singh: He is the first Chairman who is a medical man with MD degree; the first one in forty years and that is why I put this question. He is supposed to know more about these advertisements and so on and their effect.

Mr. L. J. Robbins: You will find that possibly India might wait and see

years and in a rather remote part of the country. His experience has been in the administrative field rather than in actual practice of medicine. But, as I said, I am not an expert in this field. I am merely talking as a member of the public.

Dr. C. B. Singh: I am a doctor myself, and I am putting before you the public point of view. There is a great complaint in this country also. It is a very reasonable complaint as well. So, that question has been put.

My second question is this. You have mentioned at page five, about the examination of patent applications. You have mentioned certain difficulties of the Patent Office. What will you suggest in that regard? You have mentioned that the world literature has been growing very fast and that it becomes very difficult for the Patent Office to go through everything. What will you suggest to remedy this?

Mr. L. J. Robbins: For the time being, the provisions for novelty, of Indian patents should be restricted to publications within India, as it is under the present law. If you go to the world-wide novelty concept, the Indian patent office examiners would have to consider publications in German, Russian and other foreign languages. For that, you will have to build up first an enormous library and you will need skilled people to study all those things.

Dr. C. B. Singh: The trouble will be a good number of applicants will be foreigners themselves. So, we will have to refer to some foreign publications also.

Mr. L. J. Robbins: You will find that the applications from major countries like America are well prepared and are in good form. They know what they are entitled to and obviously they will not make their claims too broad. But applications from other countries, say France, may not be so well prepared. There is no

examination in France and the claims may be rather too broad. That is why the Indian examination is important.

Dr. C. B. Singh: You have mentioned about right of appeal. Right of appeal has not been agreed to because of certain difficulties we have been experiencing in this country. If it goes to the High Court it takes 3 or 10 years or even more. That is why the Bill provides that the appeal will lie with the Indian Government. Can you suggest a method by which there would be no delay and yet the appeal will not be to the Government?

Mr. L. J. Robbins: I appreciate your point about delay. But it is not every controversy in the patent field that has to go all the way to the Supreme Court. In Germany validity is determined separately in a special novelty court which is now an extension of the patent office. In the United States and England, there are specialised courts which are constituted for this purpose. In England, there is what is known as the Appeal Tribunal and with a very few exceptions, most appeals stop there. This is a very efficient Tribunal and it disposes of appeals in a very short time. In America also, if there is a controversy about a patent application, while it is pending, it can go up to the CCPA—the Court of Customs and Patent Appeals. So, here also, except for some major concepts which involve basic rights, legal and other technical controversies can be decided on appeal by a special tribunal.

Dr. C. B. Singh: Would you fix a period for the judgment to be given by this tribunal, because time is a very important factor?

Mr. L. J. Robbins: Everywhere, if there is a controversy about a patent, a certain time is provided for appeal and if you do not exercise your right of appeal within that time, you lose the right.

Dr. C. B. Singh: The time for patents originally was 14 years. Now this Bill provides for 10 years. What is your opinion about it?

Mr. L. J. Robbins: I understand that this period of 10 years is only in certain fields like food, drugs, etc. It is contrary to experience everywhere in the world. In Switzerland, for instance, which is a small country, they had very restrictive provisions in the field of chemicals. Applications were allowed only for process claims and the term was 10 years. Finally it became ridiculous. The period of 10 years was found to be most restrictive and it actually hampered the Swiss industry. So, some 10 or 15 years ago, they enacted a very modern law comparable to that of other countries with a normal term. So, here also 10 years is not practicable and it would hamper the Indian industry. If you agree with the basic principle that the inventor should be given a limited monopoly during which he can obtain recompense and get a reasonable return, 10 years is not enough.

Dr. C. B. Singh: Do you agree that we can have 10 years and if we find that an inventor or firm has not been able to get adequate benefit and if he proves his case, the period should be extended?

Mr. L. J. Robbins: This will lead to administrative difficulties because the applicant will have to file petitions and you will have to hear evidence to determine the justice of his claim. All I can say is that a limited term of 10 years is contrary to the world trend.

Shri M. L. Jadhav: Do you agree that the prices of drugs in India are far higher than the international prices of the same drugs?

Mr. L. J. Robbins: As I said right in the beginning of my Statement, I am not an expert in this field. But, as a member of the public frankly I do not think that is true about prices of drugs in India. There may be certain exceptions but I do not think it is true as a general proposition. You should

put this question to an economist. He can answer this question far better than I can, I do not think I can say anything of much value to this Committee on prices.

Shri M. L. Jadhav: Assuming there is some difference between Indian and international prices of drugs, how far is it due to foreign patents?

Mr. Chairman: Mr. Robbins has explained that he is not competent to answer this question.

Shri Warrior: Beginning with compulsory licensing, in the absence of any agreed solution and in the context of our retaining this clause, will you agree to the percentage of royalty proposed in this clause? Do you think it equitable and reasonable?

Mr. L. J. Robbins: I thought I tried to make the point earlier. No two inventions are the same. They are different and they must be considered so. You have to consider how valuable they are, how they are developed and so on. You cannot put out an arbitrary ceiling of 4 per cent. It might be reasonable in one case and most unjust in another. No other country has any ceiling. In England among compulsory licensing proceedings in recent years, in one case the British Controller gave a royalty of 20 per cent. So, any arbitrary legislative ceiling is just not practicable and would be unjust. It should be left to the discretion of the Controller, as it is now. There should be no arbitrary ceiling.

Shri Warrior: It is our experience that if patent rights are given for products and not for processes, then the processes are never coming to India. So, we are precluded from getting the know how. Therefore, for a country like India, at least for the transitional period, do you agree that only the process should be patented and not the product so that we can get the know how in the long run and, at the same time, need not pay exorbitant prices for import of such products?

Mr. L. J. Robbins: No, I completely disagree with you there. I think I made the point that this difference between process claim and product claim is an artificial one. From the point of view of administering the Patent Office, it is very much easier to grant a product claim than a process claim. You say that India would not have the benefit if there are product claims. If a European or American patent owner, even in your controversial pharmaceutical industry, only imports, surely the Indian industry has the right to apply for compulsory licence to manufacture in India. If that happens, there may then be a voluntary arrangement. After all, a voluntary arrangement is better than compulsion in any activity. So, I do not think your point is valid that the mere existence on paper of product claims will have anything to do with its economic aspects.

Mr. Chairman: Will it not be giving a virtual monopoly to the patentee?

Mr. L. J. Robbins: Yes. But why not? What is wrong with that?

Mr. Chairman: If another scientist by a different process could manufacture the same thing cheaper, why should that be prevented? Is it in the interests of the country?

Mr. L. J. Robbins: If he invents a new process, he could then possibly apply for a licence under the main patent. Why should he not get a compulsory licence? It is quite possible, if he could manufacture by a cheaper process.

Mr. Chairman: If a licence is given to him, even though it is a new process, the person who had the licence earlier will obstruct him by virtue of his patent.

Mr. L. J. Robbins: I suppose you are talking of the pharmaceutical industry.

From my experience, particularly in highly skilled countries in Europe and the United States, I can say that it is really quite rare that when a good product has been found that the original patentee does not use the very best method. Also, just as a matter of business operations, when normally a company has spent years on research in a certain field, it is very rare that another competitor tries to break into that field.

Mr. Chairman: In any case, will it not amount to blocking another invention?

Mr. L. J. Robbins: No, I do not think this has hampered pharmaceutical research in the United States. On the contrary, it is a great reward, an incentive for research to be done. Please do not forget, when you say "a product", that it must be properly claimed and defined—its structure and so on. You are not allowed to get anything that is too broad because that is not justified by the original work that the inventor did or by his disclosure. Somebody else can come along, and find a modification; it is different and better he cannot get a patent on that new product.

Mr. Chairman: If, without reference to the old process, a scientist invents a new process and manufactures the same product in a cheaper way, why should he be prevented from making use of his process to manufacture the same product? Except, I think, America, almost all countries have only process patents.

Mr. L. J. Robbins: In this list in the Exhibits you will find that at least 50 per cent of the countries throughout the world give product protection. As I said, the difference is becoming artificial. Under your own present patent law, a scientist who invents an entirely new process for making a known product could get a patent for it. You know that. If you had product patents in this country, the inven-

tor of this new process would have to apply for a licence under the dominating patent. And why should he not get it? If he has applied for a compulsory licence and if his grounds are good enough, he can get it at a reasonable royalty and can manufacture under his improved process. After all, he was not the basic originator of the product; he came along latter. It is true, he has made a contribution and nobody can prevent him from using it. The only thing is that he will have to pay a reasonable royalty to the basic patentee. What is wrong with that?

Mr. Chairman: They have been prevented here in India.

Shri Warrior: Some manufacturers may have different processes for a product and may not be giving out all the processes to the patent office in the first instance but may, at the time of the expiry of the right after 14 years or so, bring forward a very small amendment of the same product and take out another patent so that the protection to the product or the process is extended still further by 14 years precluding all others from having the advantage of utilising that. As Mr. Robbins suggests, technological development is taking place so fast and new processes are coming up and this monopoly right is coming in the way of those new processes being operated upon. So, should there not be anything about that in the provisions of this Act?

Mr. L. J. Robbins: I consider that that argument is in favour of product protection. If you grant only process patents, when the first one has expired, that is available for anybody to practice because the term has expired and there is no more monopoly. If somebody invents another process, he would have to compete with the original process. You say that this is better. Well it may be better; but talking in simple terms like "better" I assure you, is not very practical. It is very rare that some absolute third party comes in and

finds a better process. It is true, it can happen; but I can tell you, that this is not generally the experience of countries elsewhere in the world.

Now, here are two major countries, the United States and England. Both have product patents. The new Scandinavian law, which probably will be enacted in the four Scandinavian countries,—permits product patents in this field and it is highly likely that in the near future Germany will adopt it because, as I say, the distinction has become so artificial.

I appreciate your position here. I have been to India several times and I know what your problems are. However you think that this emphasis on the distinction between product claims and process claims is a better solution, but I can assure you that it is not.

Shri Sham Lal Saraf: While I appreciate very much the lucid and detailed exposition that Mr. Robbins has given to this Committee, I would like to ask him a few questions. After hearing Mr. Robbins I find that there can be two approaches—one that of a scientist and the other that of a lawyer. All that Mr. Robbins has explained, to my mind, is the legal approach. As rightly pointed out by the hon. Chairman, the scientist feels the other way round. The scientist feels that there are other processes which could be found out to reach the same end-product. Speaking strictly from the legal point of view, I agree with the contention of Mr. Robbins of registering under the patent law the process-cum-product, but in our country there are two or three things which have to be kept in the background. Firstly, we have very poor know-how here; secondly, we have just started particularly in the pharmaceutical line and, thirdly, there is the question of capital about which there is no mention in the note of Mr. Robbins. Keeping that in view, our countrymen, particularly our scientists, are very much urged to go ahead about finding out the new know-how. Now if some Indian scientist is in a position to find out a particular product through

some process which is not included in the patent of the patentee who has taken out a process-cum-product patent, speaking strictly from the legal point of view will you agree that such a scientist should be accommodated either through compulsory licensing or through some other provision in the law?

Mr. L. J. Robbins: I appreciate your problem and view point, but I would point out that there has been a revolution in chemistry in recent years. What was called, chemistry a generation ago was a difficult and an empirical science. It is becoming much better organised now and we are finding out so much about the nature of chemical reactions. In the field of pharmaceuticals—you all seem to come back to this—the main problem is how to find a product to do some specific job. In India you have certain problems of tropical diseases. The accomplished scientist, the doctor-scientist, through his knowledge has a very good idea of what he wants and what its structure would be, but the point is that he has to make it first and try it out. It may work; it may not work. The actual process of making it has now become relatively simple, because most processes now claimed in patents are really only one step. You put this molecule together with that one and something happens; they join up. As I say, this is now becoming rather common knowledge to all scientists. So, there is not so much invention any more in working out the chemistry of the steps; it is more in knowing the sort of product you want and what it will do. For that, of course, the main research problem is to make a series of these related products and try them out medically to find out which one works. When you talk about a better process or say somebody comes along with a better process, the original work was really done by the basic inventor. The second man who comes along with a better process can do research in his own field, but the second man is not the original inventor.

Shri Sham Lal Saraf: Therefore, some accommodation is called for.

Mr. L. J. Robbins: The whole purpose of the patent system is to provide a reward and unless it is a reasonable reward, it will not work. I do not know whether you have considered this. In America, you know, we talk about somebody who gives something and takes it away as an "Indian giver". Of course, we are not talking about Indians here; we are talking about our own Indians. I feel your proposed Patent law in one way offers a reward and takes it back in another way.

Shri Sham Lal Saraf: My question is very specific as explained by the Chairman. There is a local scientist who just invents a new process and comes out with a product which is already patented. The process is different and the product is already patented. Will you give some reward to a person who has invented a new technique or a new process? Keeping that in view, what I was putting to you was whether such an inventor or such a person who is able to invent such a process be given some accommodation under the law.

Mr. L. J. Robbins: What do you mean by 'accommodation'?

Shri Sham Lal Saraf: For instance, compulsory licence or something like that. The Committee may think about that.

Mr. L. J. Robbins: We are assuming that there is a product patent and that another inventor comes along with a new process which is not described in the original. Well, he can obtain a patent because it is a new process. He can also obtain a compulsory licence and he will have to pay a royalty which should be reasonable. Surely, he is not hampered. The only thing is that he will have to pay a reasonable royalty which I consider is just because he is not the basic originator and he comes along as a

secondary man who has made an improvement. It seems to me that that is perfectly fair and that would not hamper the Indian industry at all.

Shri Sham Lal Saraf: The second question is this. You said about India joining the International Convention. May I know what may be the pre-requisites for a country like India joining the International Convention so that the policies and the programmes followed under the International Convention are kept at par in this country also?

Mr. L. J. Robbins: No pre-requisite whatsoever except that it is assumed you have to have a patent law. If you look at the list of countries, you will find countries like Indonesia....

Shri Sham Lal Saraf: What I mean to say is whether there is anything specific under the patent law that may be enacted or enforced in a particular country for joining the International Convention?

Mr. L. J. Robbins: There are two aspects to that. If a country joins the International Convention, there will be the question: Is this a country where the whole of an International Treaty is self-enacting? In other words, if so, everything in the International Convention automatically applies to that country. The other question will be: Is this a country where special laws have to be made to conform with the Convention? I believe that the Convention would not be self-enacting in this country. Am I right? I am sure there are some lawyers on this Committee. I believe that is correct. If you join the International Convention and you wish to comply with all the provisions, you would then have to make some special legislation to alter the provision of a law based on this Bill particularly in the field of compulsory licensing.

Shri Sham Lal Saraf: As a corollary to this, may I ask this question. You mentioned about the interna-

tional cooperation with regard to the patent law and the relation that it will have among the different countries. May I know what can be the outstanding points which will ensure that international cooperation?

Mr. L. J. Robbins: International cooperation, obviously, depends on people doing certain things. There is already an association of the heads of Patent Offices, at any rate in Europe. They are cooperating with the United States Patent Office. They have continuous meetings; they are talking over all this and trying to adjust their procedures. There is no reason why they would not be delighted to cooperate with India.

Shri Sham Lal Saraf: In this international cooperation, there should be some area of agreement among the cooperating countries.

Mr. L. J. Robbins: I think, essentially, yes. There is already, at present, an informal arrangement—let us call it semi-official. It is because of this that the Indian Patent Office should cooperate, generally, with the European Patent Offices and the United States Patent Office and that would be a very fine result.

Shri Sham Lal Saraf: While giving out your mind on certain issues, you revealed the information to the Committee that till now there are 20 business or commercial relations established by American firms with their American know-how and that there are 30 service connection also established. May I know whether you are apprised about the experience that they have gained in India and whether that know-how is bearing some success? Secondly, may I know whether that know-how is getting cooperation and appreciation from Indian scientists as well as from Indian businessmen?

Mr. L. J. Robbins: These are members of the National Foreign Trade Council. As far as I know, basically they have had some problems. But

they would not be here unless they were satisfied with the prospects here in India. You would hardly invest your capital unless you know there are good prospects. Surely, they would not be here unless they thought that the future was good. That is all I can say.

Shri Sham Lal Saraf: You mentioned today about the American capital getting sceptical for investment so far as Italy is concerned. I suppose there is no such position as far as India is concerned?

Mr. L. J. Robbins: I did not say that American capital was completely removed from Italy. There are political considerations...

Mr. Chairman: He said the something may happen in India.

Shri Sham Lal Saraf: Today, that is not there. Today, all the American know-how has been imported into this country. What I want to find out is this. Whatever items we have patented under the law, the American know-how has been imported into this country—the experience is not otherwise—and today it is not as it has been expressed in Italy.

Mr. L. J. Robbins: I know that an enormous amount of know-how has been brought here, many products of the most modern type are being made.

Shri Sham Lal Saraf: You said that, as far as industrially advanced countries like Germany and Japan were concerned, most of the patents were owned by foreigners. May I know whether it is necessary to create some climate here in favour of getting those patents registered and if so, what sort of climate is to be created?

Mr. L. J. Robbins: I said that there were three countries—the United States, Germany and Japan—where the majority, since they are highly industrialised, were taken by their own nationals, but even so, in those

countries, there is a very substantial number of patents taken out by foreigners. In the United States, it is as large as 25 per cent and in Germany and Japan, it is probably more; so it is only a matter of degree. There are many many foreign activities in the United States; in Germany and Japan also, there are many foreign activities. This is coming back to the international co-operation theory in the technical field.

Shri Sham Lal Saraf: My point was about creating some climate before a foreign patent can be successful.

Mr. Chairman: Please do not go to general questions. Ask only a few questions.

Shri Sham Lal Saraf: In the background, a number of things come up. We have examined so many witnesses.

Mr. Chairman: Still there are so many members who have to put questions. Please put only a few questions.

Shri Sham Lal Saraf: Mr. Robbins, I hope you catch my point. I was asking whether any particular type of climate was necessary for getting the imported know-how successfully or getting imported patents registered.

Mr. L. J. Robbins: I think I said at the end of my Statement that the very best solution would be to interest the whole scientific community. I would think of appointing a special Government Commission. This is a case of education. In America, some scientists and some businessmen are not even now fully acquainted with the whole patent systems. It is one of the fields where it is necessary to go back to first principles, i.e., education. Obviously the whole thing will not develop unless the scientists are fundamentally interested.

Shri Kashi Ram Gupta: You have explained at length about compulsory licensing, but nothing has been said

about "licences of right". Will you please give your opinion about "licences of right"?

Mr. L. J. Robbins: I consider "licences of right" as of negligible importance. If something is available to everybody, nobody wants it. The idea of "licences of right", I think, probably arose originally in the English-speaking countries—and basically this whole provision of so-called "licences of right" was meant for the poor inventor, the individual inventor, who may have a small invention. As you know, in those countries, you have to pay taxes on a patent, "licences of right" were tied up with taxes; if you endorsed voluntarily your patent with the words "licences of right", you pay half the taxes. But personally I do not know of any case where anybody has requested a licence under a patent endorsed "licences of right". It is against human nature because everybody can get it. If you obtain a licence and start investing on it and put the product on the market, everybody else would be able to come in. A very good example of that is this; after the last War, all enemy properties were seized in America, including industrial property rights and patents. All German and Japanese patents were made available by involuntary "licences of right" to anybody in the United States for one dollar. As far as I know,—there may have been a few minor exceptions—nobody took advantage of that. Why should anybody get a licence under an involuntary "licences of right" when his competitors could also come in and get the same benefit out of it? I consider "licences of right" whether voluntary or involuntary as ineffective and as a matter of negligible importance.

Shri Kashi Ram Gupta: Are you in favour of including these provisions or are you against these? Our Bill has got this clause and the Model Law has also got the same clause.

Mr. L. J. Robbins: They are not the same, but as I said I consider it as of negligible importance.

Shri Kashi Ram Gupta: The question is not whether it is of negligible importance or not. My question is whether you are against it or are in favour of it.

Mr. Chairman: It is for us to decide.

Shri Kashi Ram Gupta: In the Model Law, on page 49, about the time limit for a patent, it is said—it is given in the final commentary at the end of the first para—that in any case a patent will be valid for at least ten years after grant. What is your opinion about "after grant"—not from the date of application.

Mr. L. J. Robbins: I am sorry, I do not know what exactly is the question. What is this "ten years after grant"?

Shri Kashi Ram Gupta: There are two or three ways of loaning it: one is from the date of application; our present policy is the date of completing the specifications; the third is from the date of grant of the patent.

Mr. L. J. Robbins: A patent does not exist until it is granted. When it is filed, it does not acquire status because it is so uncertain; it may be changed during examination. Only when it is granted do you know what it is. It does not exist as industrial property until it is granted.

Shri Kashi Ram Gupta: At present the Bill contains the provision that the ten-year period will be from the date of completing the specifications, while the Model Law contains a provision that the ten years can be from the date of grant of the patent.

Mr. Chairman: It is for us to decide. Why do you want his opinion? The Model Law is for our consideration.

Shri Kashi Ram Gupta: He has quoted the Model Law in his speech. That is why I wanted to know his opinion.

Mr. Chairman: He has supported it.

Shri Kashi Ram Gupta: Yes; that is why I wanted to know his opinion on this specifically. This is the way the pharmaceutical industry is organized: they have got their research laboratories; they have got their yearly expenditure; they have also got income-tax assessments. Therefore, when this is the case, how do you say that 10 years will not be sufficient for any one who makes an invention because when the inventions are mostly applied for by firms who employ the scientists and those scientists may be getting regular salaries or any remuneration which may be agreed to between them and the firm, but the actual inventions are applied for by the firm. When such an arrangement is there, why is the 10 year period not sufficient?

Mr. L. J. Robbins: I can only refer to what the experience is in the rest of the world. I mentioned that Switzerland is a country which has got rid of this 10 year limitation. That is a country where probably there are more patents owned by foreigners than their own nationals. That is true of most of the countries of Europe. That is true of Holland. That is true of Belgium. They all have no limitation of 10 years but a normal term for all patents. They do not discriminate between patents in the pharmaceutical field and patents in the other technological fields. I say that from my own experience, which has been tied up in recent years with the pharmaceutical field and I am well-acquainted with research in the USA and Europe, it usually takes a minimum of 5 years from the initiation of the idea or the concept before it gets to the market. As you very well know, in this pharmaceutical field you cannot just make a product and sell it to the public and a minimum of 5 years is necessary before the product is refined and ready for the public. So, out of the 10 years, only 5 years would be left and that is too small a period to make a reasonable profit. The patentee has been spending a lot of money

during the initial period to get the product. Also researchers may have to possibly make 100 attempts to make a new pharmaceutical product when probably one is successful.

Shri Kashi Ram Gupta: These expenses are regular expenses of the firm. They are not special expenses of one particular aspect. From the economic point of view these are all allowed yearly. This is my point. Dividends are declared after all these expenses are allowed in income-tax assessments.

Mr. L. J. Robbins: This question really, I feel, relates to economics and I cannot really pretend to be an expert there.

Shri Kashi Ram Gupta: You have said that the Patent Law is being examined in America and there are some controversial points in it. You also say that we must wait till the result of that comes out. How much time will it take?

Mr. L. J. Robbins: I did not say 'You must wait'. I just made a suggestion.

Shri Kashi Ram Gupta: I am inquiring about the time it will take for the American Govt. to arrive at a decision.

Mr. L. J. Robbins: They are in a great hurry. As I said my Sub-Committee has worked all last year. We have had meetings every month and the President's Commission which was appointed in April, 1965 hope to report to the President in October this year. It hopes to make definite recommendations. As I say whether there will be an actual change may take some more time, but there is going to be something definite in October, 1967. We are proceeding with great speed.

Shri Kashi Ram Gupta: Our Patents Bill so far as other items are concerned, leaving aside the drugs, has laid down a period of 14 years. Formerly, it was 16 years. Therefore, there is a deduction of only two years. What is your opinion about this?

Mr. L. J. Robbins: In the present-day conditions 14 years is not long enough. It is contrary to the main trend. The main trend seems to be 20 years. That seems to be reasonable and most patents take 3 to 4 years at least before they gain ground and so they are left with only 16 or 17 years real protection.

Shri Kashi Ram Gupta: In India in the present circumstances no representation has come from any quarter regarding other items excepting drugs.

Mr. Chairman: I think each hon'ble member should not ask more than 2 questions as there are other members also who would like to put question. So much of evidence has already come.

Shri Kashi Ram Gupta: When he comes to give evidence, questions also should be put to him that there are no representations in this regard from others.

Mr. Chairman: We have other witnesses also.

Shri Kashi Ram Gupta: So far as other items are concerned, there are no representations.

In the last paragraph of your memorandum you have said:

"On the basis of these submissions, I respectfully urge that Patents Bill 1965 should be withdrawn for further study. In the light of what other countries have found to be a very satisfactory procedure when important new legislation is contemplated, I suggest that the Government should appoint a Special Commission of prominent citizens from all sectors of the community to study the true interests of industry and the public under the patent system, and to make appropriate recommendations after also considering the developments in other countries."

You may please note that this is a sovereign body of the Parliament

where all interests are represented and this Bill was drafted by Government on the basis of the Justice Ayyangar Commission's recommendations which has gone in detail into the Patent laws of other countries also. What more is required? Then how have you been prompted to say that this Bill should be withdrawn and a Special Commission of prominent citizens appointed to go into it?

Mr. Chairman: That is a suggestion he has made. It is for you to accept it or not.

Shri Kashi Ram Gupta: What does he mean by a Special Commission of prominent citizens? That I want to know.

Mr. Chairman: I don't think he has read Raja Gopala Ayyangar Commission's report.

Mr. L. J. Robbins: I merely respectfully submitted that as a suggestion. I am well aware of what is going on. I know the Ayyangar Commission's report and also the previous one. But I would point out that there have been no recent public hearings in connection with this problem and the present draft of the Bill seems to be, at least to my mind, just putting the cart before the horse. I would suggest that normally it is necessary to have hearings to get the benefit of the present views of industry, the patent profession and scientists before specific provisions can be prepared.

Mr. Chairman: Here too, Government draft the Bill and introduce it in Parliament which remits it to the Select Committee. We do not generally publish the Bill, Government publish it in the Gazette and anybody interested can send his views.

Shri Kashi Ram Gupta: Are you aware of the fact that a large number of Indian scientists are for a short period for patents?

Mr. L. J. Robbins: I am not aware of that. What is the reason?

Shri Kashi Ram Gupta: They want a shorter period than what has been contemplated in the present Bill.

Mr. L. J. Robbins: But they must have some reasons for their opinion. What is that?

Shri Kashi Ram Gupta: They have given the reasons also. Finally, I want to ask you one thing. As you are giving evidence on behalf of the other Association also, there is a point mentioned there. There is a company called Selas Corporation. They have not taken any patent in India. Why could not this company come to India for the last 15 or 16 years when the old Patent Law was in force?

Mr. L. J. Robbins: I am afraid I don't have enough information to answer that question.

Shri Kashi Ram Gupta: This is contained in another memorandum given by the National Association of Manufacturers. So, because I was told this morning that you are also giving evidence on their behalf, I put this question.

Mr. L. J. Robbins: No, I am not appearing here on behalf of the National Association of Manufacturers. Their representative has not been able to come. So, the Chairman gave me his time.

Shri Bibhuti Mishra: You have suggested that this Bill may be deferred or postponed or delayed and after that you want a high-powered commission to be appointed and that the commission should go all round the world. Then after that, taking the experience all over the world, this Bill should become an Act of this Parliament. What is your idea? Why do you want this to be delayed?

Mr. L. J. Robbins: I can only say that my viewpoint is entirely pro-India. I am merely trying to submit that on the basis of my experience, I consider this Bill is fundamentally restrictive and I am merely drawing your attention as a Committee to what is taking place elsewhere. I am not

proposing that you should appoint a Commission tomorrow and send it round the world. That is not what I said at all.

Shri Bibhuti Mishra: You are in favour of patents. Keeping the conditions of India in view, how much do you want to give to the inventor as honorarium, how much should be the profit for the industry and what would be the price for a particular medicine in a country like India which is very poor? Do not compare with America or Western countries.

Mr. Chairman: He says he is not an expert on prices.

Shri Bibhuti Mishra: We are concerned with prices. He comes from America which is one of the most wealthy countries in the world and if the price of a particular medicine is one dollar, here the people of India would not be able to pay one dollar. So what would be the benefit for India? Suppose a patentee comes from America to India and if he manufactures a medicine here, what would be the price for that medicine?

Mr. Chairman: He says he is not an expert on prices and can't answer questions on price. He has said he is a patent attorney. Tomorrow another witness is coming. He is an economist and you may put this question to him.

Shri A. T. Sarma: Your Council has suggested the postponement of the Bill until the situation in other countries is clearer. You say that the American Government is also reviewing the Patent Law and you ask us to wait till that decision comes out. But we think we need not wait till then. We think we should pass this Bill at present to improve our research and development and industrial activities. If it becomes necessary later on, we can bring an amending Bill. So we find that the ground given for postponing this Bill is not sound. Do you agree with us?

Mr. L. J. Robbins: I am not trying to suggest what this Parliamentary

Committee should do. I am merely here to offer some suggestions based on my own experience and as I said it seemed to me—patent makers are in such a state of ferment all over the World—that possibly the things that might happen in other countries might be of some benefit to you, rather than thinking solely of specific Indian problems. This is my only suggestion.

Mr. Chairman: It is only his suggestion; we may or may not agree with it.

Shri Dalpat Singh: On page 12 of your statement, you have said that "the backlog in the United States Patent Office has increased." May I know the factors which lead to this backlog?

Mr. L. J. Robbins: Basically, it is partly due to the very complex American procedures. But it is also due to the fact that the number of patent applications filed each year has been steadily increasing. Also, there is such a demand for technically trained people in industry that they often stay in the patent office for a few years and then go into industry, and so the investigation work does not proceed rapidly. The examination of new applications just gets pushed further and further backwards which is very bad. It is bad for industry since it takes years before the new developments are published. Early publication is highly desirable for the improvement of technology and further developments.

Shri Bade: Do you agree that there should be some difference between the patent law of a developed country and the patent law of a developing country?

Mr. L. J. Robbins: Yes, I most strongly agree. That is why I think the BIRPI Model Law is a worthy proposal. I do not agree with everything here, but I think basically it is a very sound proposal and I think I said before that the best patent laws are the simple ones.

Shri Bade: That difference is made in the Model Law also?

Mr. L. J. Robbins: Yes.

Shri Bade: On page 4 of your memorandum, you have stated that "furthermore, the possibility of compulsory licences to import products would actually favour foreign over domestic Indian industry." How do you support this?

Mr. L. J. Robbins: The compulsory licensing proposals are similar to those in International Convention and those at present operative in many countries throughout the world. They are generally similar.

Shri Bade: In our Bill also, the provision regarding compulsory licensing is the same as given in the Model Law.

Mr. L. J. Robbins: No. They are far more drastic.

Shri Bade: Those provisions in the Bill are made according to the recommendations of the Model Law for the under-developed countries.

Mr. L. J. Robbins: No. The Model Law proposal is that after 3 years from grant, if the patent has not been worked, then it is only after two year of compulsory licensing that they may be a possibility of revocation.

Shri Bade: The same provision is there in West Germany, Netherlands, Italy etc.

Mr. L. J. Robbins: Which provision?

Shri Bade: About compulsory licensing. In USA, there is no provision. In U.K. compulsory licensing of patents can be granted upto 3 years. The same provision is here in the Bill.

Mr. L. J. Robbins: The restrictive provisions on compulsory licensing involve arbitrary powers.

Shri Bade: Our provision in the Bill is identical to U.K. provision.

Mr. L. J. Robbins: Not at all. In your present patent law some years ago you adopted the same provisions as there are in England.

Shri Bade: The difference is in compensation, in the U.K. provision and our provision. Under our provision, the maximum compensation will be 4 per cent of the net product of the sale.

Mr. L. J. Robbins: There is no such provision in England.

Shri Bade: But now if we say that 4 per cent compensation is maximum that will be given on net product of the sale....

Mr. L. J. Robbins: Was not the same question asked a little while ago and I said you could not put arbitrary ceiling on things that are different.

Shri Bade: How is it arbitrary?

Mr. Chairman: Let us discuss it.

Shri Bade: Whether it should be on the net product of the sale or whether it should be on the working of the period of the patents. Just as in the Model Law, the compulsory licence shall only be granted subject to the payment of adequate royalty commensurate with the period for which patent is worked. That period should be taken into consideration. But that is not the provision in our bill. Whether that provision should be there or whether only royalty should be given.

Mr. L. J. Robbins: I am sorry, Sir, I do not quite see just exactly what you are asking.

Mr. Chairman: The Model bill provides adequate compensation but our bill provides 4 per cent compensation of the net sales.

Shri Bade: One more factor. The period for which the patent is working i.e., suppose for 10 or 20 years they have taken profit, that period

should be taken into consideration while giving the compensation. We said that the highest compensation should be 4 per cent to be granted on the net sale of the product.

Mr. Chairman: What is your objection? Model Law says the amount of compensation is justiciable.

Mr. L. J. Robbins: I just do not think the arbitrary ceiling of 4 per cent is just. I do not think it is fair. I do not think it will encourage inventions in this difficult field. I do not think it will encourage Indian inventors. I have said this before.

Shri Bade: You have said, process-cum-product should be patented.

Mr. L. J. Robbins: I do not think any one in any country in the world, if there is a fair operation and the Controller or anybody else handling this compulsory licensing, deals with it justly in a legal manner and considers all the facts and comes to a fair decision about what the royalty should be, would have any objection; but it should be completely variable and may be much more than 4 per cent or may be less than 4 per cent.

Shri Bade: The question is whether patent should be only for processing or for product. You have said that process-cum-product should be patented.

Mr. L. J. Robbins: Well I think you would be largely defeating your own purpose if you limit it in this field just to processes to be carried out in India without giving any protection to the product at all. That will mean Italy can import the product and the patentee would have no recourse. Isn't that right?

Shri Bade: In Japan, only processes are patented on the ground that if the product is not patented and only processes are patented, there would be other scientists who will be encouraged and they will find some other process to have the same product.

Mr. L. J. Robbins: That is not correct, as regards Japan. The product is most definitely protected as made by the process and foreigners can sue in the Japanese courts I can assure you. The two things are tied up.

Dr. M. M. S. Siddhu: You have said on page 3—while discussing process and product patent—“therefore there is no basic difference but only a matter of degree, between what are termed ‘product’ patents and ‘process’ patents by the uninitiated”. If there is not so much of a difference and it is purely theoretical whether a person will be able to come to any other profitable method to get to that product, then why all this fuss at all.

Mr. L. J. Robbins: When I say there is no basic difference, I am naturally assuming that there has to be a competent patent attorney who fully cooperates with the inventor in preparing claims. In Germany, for example, there is a very good example. The whole emphasis is on the product itself. The process can be completely conventional, but you have to prove to the satisfaction of the German Patent Office that your product is new. I am mostly concerned in this field with the complications in the patent Bill itself. The moment you grant protection to the product, it will be quite easy to administer the law, because then it would be absolutely clear.

Dr. M. M. S. Siddhu: A person may produce a drug for limited use, but it is only after long clinical trial it becomes known, that it may have other uses which the inventor never thought of; even then he gets the benefits of patent rights, and the person (physician) who has made its use possible does not come into the field at all. Therefore, in medicine it is not only the inventor but also the physician who plays a vital role. So, don't you think that the medical world does need the benefit of it and therefore the number of years for which a drug should be patented should be different from the number of years for other articles?

Mr. L. J. Robbins: Frankly I do not quite see what this has to do with the patent law itself. I agree that there have been a number of examples where drugs were intended for one purpose and by chance they were found beneficial in other fields, but that is customary. But I consider that at the present time in India your Government's basic concern is not with highly specialised drugs, but with sulphur drugs, antibiotics etc. which are most needed, and for which there is now no patent protection or only patents that expire in a very short time.

Dr. M. M. S. Siddhu: That is not the only thing. Patents are connected with trade names. A doctor is accustomed to write a particular drug. Even after the period of patent is over, he continues to write the same drug, with the same trade name.

Mr. L. J. Robbins: I do not think that this question of trade name really has any relevance to this. Most of these are condensed terms of chemical names, used for general convenience, but Trade Marks are important because they imply a standard of quality. I mentioned previously the problem of Italy having 20 or 30 names for really the same product.

Dr. M. M. S. Siddhu: That problem will still remain if the drug is to be used even after the patent period has expired. What are you going to do to overcome that?

Mr. L. J. Robbins: Yes, but I do not know whether the patent law can solve all problems of human nature and business practices.

Dr. M. M. S. Siddhu: Don't you think that on humanitarian grounds drugs should be treated differently?

Mr. L. J. Robbins: I do not think so because they are products of very intensive research, and it is contrary to basic ideas in this field to differentiate between products of different technologies.

Shri Wasnik: You have said on page 5:

"Clause 13(2) provides for a novelty search of publications in India or elsewhere. But the Indian Patent Office has no library facilities for such searching."

In this context, would you recommend that we grant patents on the trade registration system of France?

Mr. L. J. Robbins: I think that would be a backward step, because on foreign patents coming in here from countries of Europe and America they have to do very little work, but in other cases it would be different.

Shri Dahyabhai V. Patel: As you may know, medical science is quite ancient in this country; the system of medicine known here as Ayurveda is the oldest medical science in India, and it has given to the world some of the drugs which are considered very potent and as a specific for some diseases. For instance, I may name one of them which is used to relieve blood pressure; it is known as *serpina*.

Shri Warrior: *Serpentina*.

Shri Dahyabhai V. Patel: There are so many other drugs like that. The people of India feel that this is something that can go to the world outside. But India has not been able to get the advantage out of it. These drugs are recognised abroad as very potent all over the world, and India has to purchase the material from abroad. Perhaps they are processed better, and the result is that we have to pay very exorbitant prices. What is the remedy for this? Does the Patent Law provide a remedy for this? Is the present patent law going to help research in this direction and do you think we are equipped for that?

Mr. L. J. Robbins: It was my understanding that these drugs here have been developed through thousands of years of research, and are derived from native plants of India, which grow

here in India. Why do you say they are expensive, I do not quite understand.

Shri Dahyabhai V. Patel: Now we are importing some drugs for the relief of blood pressure. Most of them are imported.

Mr. Chairman: It is manufactured here.

Shri Dahyabhai V. Patel: Some of it is manufactured here. The point is, they cost tremendously.

Mr. L. J. Robbins: One of the best now has the trade Mark *Hydro Diuril*; it is a synthetic compound. It is not a natural compound. I did not know that these natural things are imported from abroad.

Shri Dahyabhai V. Patel: The drug is exported and processed and we get it back.

Shri Warrior: The raw material is exported.

Mr. L. J. Robbins: In cases where the raw material is available in India, it should be developed as an Indian industry.

Shri Dahyabhai V. Patel: Do you think that the present patent law is going to help this country to conduct research and provide the people with cheap drugs indigenously, or, will we have to depend still on knowledge and research abroad?

Mr. L. J. Robbins: Obviously for the next generation, you will have to depend largely on others. It is not a unique thing for any country. I feel very strongly that Indian research will rapidly improve, but a law based upon this Patent Bill would hinder Indian research itself. Many industries may not know about it, but I can assure you that they can take advantage of it. Owing to the technical nature of the patent legislation, it might take many many years before you could modify it. One should not deliberately run into a bad situation.

Shri B. K. Das: You have mentioned in your memorandum that the legislature as a whole, irrespective of the economic and social pressures which may be responsible for some of the provisions of this Bill, is not yet aware of the purely practical problems of patents. Would you like to clarify this? What practical problems can be there if this Bill is passed into law?

Mr. L. J. Robbins: In the Patent Office itself, I think there are a number of things. We discussed one of them, and that is, if examiners have to examine this all over the world you will have to increase the staff and spend more money and get highly specialised people. You will have to take away from the industry itself, where they have knowledge of languages, German or Russian or some of the European languages. That is one problem. Also, on the whole, these special provisions and restrictions you are putting in impose a tremendous burden on the Controller-General. He will have to have an enlarged staff. Do not forget that you are making him practically equivalent to a judge. He will have enormous economic power in his hands to affect industry greatly which, I think, is giving rather too much power to an appointed official. I am sure that the Patent Office may be greatly expanded in 20 or 30 years. But I feel that there are so many other things immediately urgent in India, and expansion of the Patent Office at the present time seems to be not too practical.

Sardar Daljit Singh: You have referred to a few clauses of the Bill in your evidence. Should we take it for granted that you are in support of all the other clauses of the Bill?

Mr. L. J. Robbins: No, Sir. Quite definitely not. I thought I made it clear that other people and other orga-

nisations will discuss this Bill section by section. I have merely concentrated my study on a few sections just to save time. I know what has been said on some of the other sections. I am sure you are going to get very expert, legal, well-reasoned statements on all sections of the Bill that are controversial. I only picked out those features of the Bill which have special relation to my own competence and it would not be correct to say that I am in favour of all other clauses of the Bill.

Sardar Daljit Singh: There is a vast difference in the price of some of the foreign patented drugs and products. For example, vitamin B12 costs like this: its initial market price is Rs. 2 per gram while its subsequent market price is Rs. 40 per gram; streptomycin costs Rs. 19 per gram, while its initial market price would have been just Re. 1 per gram.

Mr. Chairman: He has said that he is not an expert on prices. Tomorrow we are going to get another witness who is an economist and who can speak on prices. You can reserve that question for him.

Shri Sham Lal Saraf: All is well that ends well!

Sardar Daljit Singh: I want to know whether these high prices are found to affect adversely the interests of the common man in India. I want to know his opinion about it.

Mr. L. J. Robbins: I decline to answer it, though I have a personal opinion on it. But I do not think it will be of any interest. So, I very respectfully decline to give it.

Mr. Chairman: Thank you, Mr. Robbins.

The witness then withdrew.

(The Committee then adjourned)

Minutes of Evidence Given Before the Joint Committee on the Patents Bill, 1965.

Saturday, the 2nd July, 1966 at 10.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

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2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Bibhuti Mishra.
7. Sardar Daljit Singh.
8. Shri Basanta Kumar Das.
9. Shri V. B. Gandhi.
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11. Shri Kashi Ram Gupta.
12. Shri Madhavrao Laxmanrao Jadhav.
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25. Shri B. T. Kulkarni.
26. Shri P. K. Kumaran.
27. Shri Shyamnandan Mishra.
28. Shri Dahyabhai V. Patel.
29. Shri Mulka Govinda Reddy.

30. Shri M. R. Shervani.
31. Shri Dalpat Singh.
32. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESS EXAMINED

Chamber of Commerce of the United States of America, *Washington.*

Spokesman

Prof. Maurice D. Kilbridge.

Chamber of Commerce of the United States of America, Washington

Spokesman:

Prof. Maurice D. Kilbridge

(The witness was called in and he took his seat)

Mr. Chairman: We have received your earlier Memorandum which has been circulated to the Members. You have given another Memorandum this morning. Any evidence that you give before this Committee is public. Even if you want to say anything confidential, it is bound to be circulated to our Members. If you want to add anything or explain your Memorandum, you may do so. After your explanation, Members will ask you questions.

Prof. Kilbridge: Nothing I have to say this morning is confidential. The

Memorandum you have before you is an elaboration of the earlier Memorandum which I sent two months ago. I would like to refer to it now and to go through it with you before we go to the questions.

Let me introduce myself. I represent the views of the Chamber of Commerce of the United States. I am a member of the faculty of the Graduate School of Business Administration of Harvard University. I have also served as a professor of the University of Chicago and as consultant on industrial development to the Development Advisory Service of Harvard University. Most recently I have served for two years as Assistant Director of the U.S. Agency for International Development Mission to India.

The Chamber of Commerce of the United States, I am sure you know, is the largest U.S. business federation. It represents more than 3,900 indivi-

dual organisations—these organisations being business firms, societies, technical groups of various kinds. The underlying membership in all these groups is about 4½ million professional and business people. I would like to explain that the National Chamber has always favoured the economic and social advancement of developing nations. In its policy declarations, the Chamber has specifically expressed its belief in the importance of the continued freedom and progress of India. The National Chamber has also supported the foreign aid programme of the United States and has in its policy resolutions commended to the State Department development of foreign commerce as part of its foreign aid programme. They have insisted that the private sector should be given every opportunity to flourish, both in the developing countries as well as in the United States.

I would like to start first with a very short summary of the economic arguments for patents before I go into a discussion of the specific problems of the Patent Bill pending and the economic development of India.

As you are aware, the patent system is an institution developed as an instrument of national policy and it is designed to serve the nation's economic interest and as such we believe it should be judged by economic criteria. In the famous Justice Ayyangar Report that we have all read, we have a very apt quotation in which he says that "Patent systems are not created in the interest of the inventor but in the interest of national economy." The rules and regulations of the patent systems are not "governed by civil or common law but by political economy".

Patent Law should be looked upon as something which is essentially, a tool of political economy, designed for the welfare of the nation, its economic and social welfare. So the essential economic argument for patents is that they are needed to provide sufficient stimulus for the working of new

inventions by industry. The patent system is based on the assumption that industrial progress is desirable, that innovation is necessary for such progress, but that sufficient investment in new products and processes will not be made if industry cannot recoup the costs and realise a profits for its effort. The simplest, most economical and effective way yet found for society to achieve this is to grant exclusive patent rights in inventions. Through the years various other arguments have been used in support of the patent system. The essential argument in favour of patents is one of social welfare and economic welfare of the nation.

The fundamental point then is that the patent system is designed to serve the economic welfare of the community. It takes its significance from its over-all effect on the economy, which is generally to stimulate investment in new products and processes and it does this by providing a protected market with the opportunity for profit necessary to justify the heavy investment of bringing the improvement to the public. The granting of patent protection is intended to allow the innovating company time to recoup the cost of invention, development and commencing production and unless the period of protection is long enough to make investment attractive, manufacturers will be understandably reluctant to make this investment.

Clause 53(1) of the Patents Bill under consideration, as we all know, provides for a ten year patent term for food and medicine inventions and a fourteen year term for all other inventions, with no provision for extensions. This is a reduction from 16 years in both instances under the present law. There is considerable doubt in my mind that this period of protection is adequate in most cases and this judgment is consistent with the patent laws of other nations of the world which provide, on an average, 17—18 years of patent protection. Also, there is sound reason

to believe that a relatively longer, rather than shorter, period is appropriate in the developing countries. By the time, the owner of a patent considering investment in India has studied the market for his product and the possibility of working the patent successfully and has received all the necessary licenses and approvals, there may, considering these delays and delays in importing plant and equipment, hardly be sufficient time left to set up his manufacturing facilities and start production before the patent runs out and leaves his investment unprotected. It is altogether possible that the manufacturer may decide not to take the risk.

Since the patent system provides the right to exclude competitors from producing identical product or using the same process, it is, in theory, superficially inconsistent with India's economic public policy, which is equitable distribution of wealth and de-concentration of the means of production. I insist, however, this is only a superficial inconsistency. In fact, the degree of economic power conferred by patents is far less than that of monopoly in its usual sense. Owners of patents are not free to fix monopolistic prices or to ignore the activities of competitors. There are always alternative products and processes and sooner, more likely than later, a superior non-infringing product will be brought to the market. So, a major value of the patent system is that it injects competition of a kind that otherwise would not exist. The threat of new firms with exclusive rights to new technologies compels existing companies to improve upon pain of sudden obsolescence. The net effect that the patent system makes is a dynamic, progressive environment in which business must constantly seek technological improvements. Without patents, business is apt to fall into the routine of making the same old things in the same old way. The consuming public is deprived of new products and the rate of industrial development slows. Thus, paradoxically, while the patent

system operates in one sphere by the grant of exclusive rights, and anti-monopoly laws operate in another sphere by keeping the channels of trade open, nevertheless in the ultimate objective—competition and avoidance of economic concentration—there is identity of purpose.

Now as we all know, no nation's patent system is perfect. India's patent law is undoubtedly in need of some revision to update it to suit today's conditions, to simplify and clarify its application, and to plug loopholes perhaps. We believe that revision can be achieved without basically weakening the patent system. Since the patent holder is always subject to anti-trust regulations, the public can be safeguarded without weakening patent protection itself.

Let me now turn to the subject of Patents and Economic Development which is the central theme of my presentation. We urge the Committee to support a sound patent law because we firmly believe that a patent law which will enable India to participate in international patent conventions is in India's best economic interest as a developing nation. The rate of industrial investment in India is not such that government can afford to risk slowing it down by inadequate patent protection. Industrial growth during the Third Plan, especially in the consumer goods industries, has fallen short of Plan targets. There are already special risks and burdens enough for the Indian industrial investor, and lucrative opportunities for investment in other and less productive sectors of the economy. Any further burden may lead to a weakening of industrial development.

There is also little doubt that the proposed Patents Bill will tend to retard the flow of foreign private investment into India. The foreign investor must already cope with a high tax structure, expensive and uncertain raw materials supplies—some of which has been alleviated now by devaluation—and burdensome con-

trols and approval procedures (although these are not peculiar to India). If to these is added weak and uncertain patent protection and, I must add, the attitude toward the private sector that the proposed Bill implies, then foreign investors may decide to put their factories elsewhere.

I would wish to underline this attitude toward the private sector implied in the proposed Bill, and this is what has made those in international trade circles feel slightly upset.

In particular, clauses 87 and 88 of the Patents Bill provide that all patents for goods, drugs, and chemicals will be endorsed as "Licenses of right," and that where an endorsement "Licenses of right" exists any person wishing to work the patent in India may require the patentee to grant him a licence on terms decided by the Controller of Patents—not to exceed a four per cent royalty, as we know, on the ex-factory price. These clauses, in effect, virtually deprive the affected industries—and especially the important pharmaceutical industry—of their patent rights, throwing open these patents to any number of applicants without regard to their financial or technical ability to work them properly, and setting a ceiling on royalties rather than allowing for free negotiations based on the merit of the product involved. Aside from the special burden, this places on the drug industry, this abrogation of industrial property rights without court appeal seems to be inconsistent with India's high international reputation for legal process, and cannot but put some doubt in the minds of prospective investors about the future security of industrial investment in general.

Now let us look for a moment at the changing nature of foreign investment in India. I made recently a study of the structure of foreign private investment in India, its sources and the industries into which it is flowing, and I can summarise the following information for you.

There has been a shift in the sectoral distribution of foreign investment in India since independence and because of this the relevance of patent protection to investment is of increasing importance. There has been a sharp decline, relative to the total, of investment in the traditional sectors of services, plantations and mining; they are receiving very little investment; the collective share of these sectors in total investment has declined from 63 per cent in 1948 to 29 per cent in 1965. This is the position in the traditional sectors of the economy. At the same time there has been a rise in the share of petroleum and manufacturing which together accounted for 72 per cent of foreign investment in 1965, as against 36 per cent in 1948, that is to say, a doubling of the percentage of investment in manufacturing and petroleum. There has also been a re-distribution of investment within the industrial sector. Considerable diversification of investment has taken place in manufacturing where producer goods investment, especially in transportation equipment, metal products and chemicals, has increased strikingly; at the same time investment in the older consumer goods industries, such as textiles, has been virtually constant. Similarly, investment in the petroleum industry has been more in refining and less in marketing. The typical foreign investor of the future is therefore more likely than not to be a manufacturer in one of the newer branches of industry to whom patent protection is of paramount importance.

It is also interesting to note that repatriation of profits from these newer industries is at a much lower rate than from the older investment sectors. This is because they are growth industries with an eye to the future. They plow back their profits for long-range growth rather than remit them abroad. Reports published by the Reserve Bank of India indicate that foreign investors in petroleum and manufacturing industries are plowing back over 50 per cent of their earnings, while profit reinvestment in the

case of plantations and the service industries averages not more than 10 per cent of earnings. The net effect of the sectoral shift of investment is certainly beneficial to the balance of payments, and this shift can be assisted by strong patent protection. In fact, I would say that strong patent protection should be continued and is essential for the development of foreign private investment.

The net inflow of private investment capital into India has averaged only Rs. 25 crores a year since independence, and, as we all recognize, this a mere trickle as compared to India's needs. The Fourth Five Year Plan probably will set an ambitious target of about Rs. 150 crores a year of net new private foreign investment. To an increasing extent this capital is coming from the United States where it is official government policy to encourage and assist investment in India. In the year 1965 about 21 per cent of India's foreign private investment came from the United States. This compares with only 10 per cent ten years ago. United States private investment in India has grown from about Rs. 48 crores in 1955 to about Rs. 135 crores in 1965. The National Chamber of Commerce has consistently supported the United States Government's policy on private investment in India, and has consistently encouraged and supported its members in making their investments abroad. And we feel it will be easier for the Chamber to continue this support if patent protection in India is not markedly weaker than that in other developing countries competing for United States private capital.

I would like next to comment briefly on Patents and the Transfer of Technology. As important to India as the inflow of foreign capital, is the related transfer of industrial technology. There is probably no single factor, in my judgment, in India's industrial development more critical now than the availability of useful knowledge. I put this as perhaps the most important element of development. And, as is

well known, this knowledge is not embodied in patents alone, but involves a great amount of associated information and experience, both technical and managerial. Patent protection, however, provides the incentive for foreign investors to divulge and apply this knowledge in India. Once this knowledge is in use, it spreads and grows through the industrial and technical community. Indian policy and law wisely require the rapid training and employment of Indian technicians and managers in companies employing foreign capital and imported technology, thus speeding the diffusion of useful knowledge. The key to sharing the technical and managerial knowledge, and the access to world markets, enjoyed by companies of the more advanced countries is to attract their manufacturing and research activities to India. And as a very practical matter, social and economic theory aside, I do not believe, this can be done successfully on a broad basis without patent protection at least as strong as that provided by other developing nations. You know I continue to emphasize the comparative patent protection of India as against other developing countries. This, I think, is one of the most important aspects of the present Bill.

Adequate patent protection is, I believe, essential for the development of India's indigenous scientific and technical base. Multi-national corporations have in recent years decentralized their manufacturing operations out of the home country to those countries where they have substantial national markets. This has become the thing to do. You leap-frog the national barriers and establish your manufacturing units in those countries where you have a market. But as you know, research and development activities are still concentrated at home. There are very few industries which have made any effort to decentralise their research and development activities. The logical next step in the evolution of international corporations is the decentralisation of research and development. It is just now beginning and this could be of great advantage

to India in that it would provide opportunities for Indian scientists and technicians, and assist the development of indigenous technologies employing domestic materials and suited to Indian conditions. But one wonders if this step will be taken in the absence of adequate patent protection. Will a large chemical company, for example, choose to develop new products and processes in India if patent protection is inadequate to justify their commercial application here?

There is also to be considered the effect of weakened patent protection on India's developing scientific community. It is well known that literally thousands of Indian scientists trained abroad continue to reside there. In the last annual count it was found that as many as 6000 Indian scientists, highly skilled and qualified, reside in the United States; they are employed there. Many of them do not come back, or delay their return, for lack of equally good employment opportunities at home here.

Now, there has been in the past little privately financed industrial research carried on in India; most of it has been, as you know, Government-financed research. Most industrial knowledge that is in use has been imported full blown from more advanced countries. But, as the industrial establishment broadens to include science-based industries, and companies become better established and more mature, we should normally expect considerable growth of privately financed research and development activities. But will this natural evolution take place if the patent system is weakened, or will Indian industrialists consider it more to their advantage to continue to import second-hand technology? What might the effect of this latter course be on India's young scientific community?

Let me take up next the point of the effects of royalties on the balance of payments. This is a vague and difficult subject—one about which, you know, the argument is sometimes raised, contrary to the protection of foreign

patentees, that royalties impose an excessive balance of payments burden. This is a difficult point to pin down because of conceptual difficulties and the inadequacy of available statistics. Two facts seem certain, however. One is that royalty payments, are only a minor element in India's unfavourable trade balance, and the other is that the costs and benefits of royalty payments cannot be reckoned in direct balance of payment terms alone.

According to the 1961 Survey Report of the Reserve Bank of India, published in 1964, royalty payments to foreign patentees for the year 1961, which was the last annual figure available, were Rs. 2.4 crores. This is to be compared with a payments deficit (imports plus debt service less exports) averaging about Rs. 680 crores annually over the Third Plan period. In other words, royalty payments for the year 1961 were only about 0.3% of the payments deficit. When a country's balance of payments situation is as desperate as India's is today, every little bit counts and Rs. 2.4 crores is not to be overlooked. But the question must be asked whether a small direct exchange saving on royalty payments might not result in a much larger indirect loss? This is a hard balance to strike.

Now, the substitution of domestic industrial products for foreign imports depends on India's industrial growth which in turn requires an inflow of technical information and skills. To save foreign exchange on royalty payments at the risk of cutting off the inflow of technology may be to eat the goose that is about to lay golden eggs. It may be penny wise and pound foolish. The same argument holds even more strongly in the case of exports of industrial products. Since exports of the traditional agricultural cannot be expected to increase much or very rapidly because of the severe competition from the other developing countries in the field. So, if India is to raise its export earnings substantially, this increase has to come very products such as tea, coffee, and jute

largely from manufactured goods. Here, India is in a more advantageous position because it has cheap and highly qualified labour. The wealth of technical and managerial knowledge, capital resources and marketing access enjoyed by manufacturing companies in the developed countries makes them formidable competitors in the field of manufactured goods. An alliance with foreign capital and imported technology, an alliance requiring patent protection, is frequently the only practical way to enter the world market in certain industrial goods.

Now, a step in the right direction has been taken in the devaluation of the rupee—a bold and, I think, economically sound step. Let us not now take a step backward by weakening patent protection.

Another argument frequently heard contrary to the protection of foreign patentees is that high prices result from this protection either because the foreign patentee has thus acquired a protected export market in the less developed country or he has acquired a monopoly position in the local market if he decides to manufacture there.

I am told that Mr. Leonard Robbins assured you yesterday that I, as an economist, would deal with this price question. Let me immediately disavow any special knowledge of comparative current prices. My field is industrial economics in general. I know you have questions about cost-price relationships in the drug industry particularly, and these, following the skilful lead of Mr. Robbins, I shall ask you to defer, for subsequent specialists from that industry. I do not wish to dodge the issue. I am saying that I do not have detailed information about cost data and price data to give you at this time and these people. I believe, will have. I can, however, make some general observations. As with the balance of payments question, it is difficult to resolve this question precisely, but I can talk about it in a general way based on my experience in India.

Let me first refer you back to the United Nation's report on "the Role of Patents in the Transfer of Technology to Developing Countries", which all of you I am sure have read. I shall quote a very short paragraph:

"...the effect of higher prices specifically due to patent protection is almost impossible to disentangle from higher prices due to such factors as exclusive know-how, trade secrets, restrictive practices, or the dominant market position of the supplier, all of which are intrinsically unrelated to the patent system. Since patents are thus only one of the factors which may bring about higher prices, the question arises whether measures directly affecting price levels or general anti-trust legislation are not an economically more effective and administratively more feasible technique of coping with the problem than legislation devoted specifically to the patent system."

Now the existing Indian price control legislation is adequate for direct action if this is thought necessary, and, from what I have seen in the Press recently, I believe that it has been thought necessary. Getting at prices through the patent system would seem to be a round-about approach, and one for which the prospects of success appear remote. There is also good reason to believe that where prices of industrial goods in India are abnormally high, it is due more to government import and licensing restrictions and to the protected market that results from these as well as such things as the high cost of raw materials, the small scale of operations which, in many cases, have not reached the full economy of operation, the low productivity of some of the smaller factories etc; also the high cost of imported machinery and equipment, I believe, in some cases, has raised the cost of manufacture in India.

Although this statement is intended to be of a general nature rather than

the detailed analysis one might expect from a patent lawyer, specific reference has been made to several clauses of the Patents Bill. We ask the Committee not to infer from this that we consider—by “we” I mean the United States Chamber of Commerce—only the referenced clauses to be harmful to India’s future economic interests. On the contrary, a large number of the provisions of this Bill are we feel, inconsistent with internationally recognized patent principles, and will be found offensive and discriminating by both Indian and foreign business communities.

In concluding, let me urge the Committee to consider this Bill from the point of view of its psychological effects in world trade circles. This concerns me as much as anything else in this Bill, and it has upset international trade circles; people feel that India becomes, with this patent law, a hard and uncertain place to do business. The Patents Bill may cost India far more in retarded economic growth than it can possibly gain for her in any other way. The retention of a sound patent system that will enable Indian participation in international agreements is, we believe, in India’s best economic interest as a developing nation.

Thank you.

Mr. Chairman: Now, members might ask questions.

Shri Kashi Ram Gupta: Does your country make any survey regarding statistics, particularly about pharmaceutical industry, as to how generally research expenses are met and in how many years they are met because the main argument against lowering the years of patent is that the industry may not recoup what it has invested? Is there any survey made in your country about this?

Prof. Kilbridge: The question, as I understand, is whether any survey is made in the United States which

shows how long it takes to recoup the cost of research and development in the pharmaceutical industry for the purpose of comparing this with the patent protection time of ten years. My reply is: yes; such surveys do exist. I do not have the data at my finger tips. I am sure that this information will be introduced by witnesses from the pharmaceutical industry. I can give you some general readings on the subject. I do not represent the pharmaceutical industry particularly I represent here the United States Chamber of Commerce and I myself have not worked in the pharmaceutical industry. I am an industrial economist and my experience has been mostly in mechanical industries. But from general readings I have the impression that development costs vary immensely and only when a large number of cases are taken, does the average have any meaning. Some well established companies with physical facilities already available for exploiting the process, have managed to turn a profit in a matter of three to four years; in other cases where the facilities had been poor, it was necessary to build pilot plants and then new full scale industrial plant and they had to work for 12 or 13 or even 20 years to turn a profit.

Shri Kashi Ram Gupta: What is the relation of a scientist with the industry in the United States? Are the scientists regularly paid or do they also get something out of their inventions as commission from those industrial concerns?

Prof. Kilbridge: Typically an industrial scientist signs a contract of disclaimer with the company in which he is employed under which he gives up all patent rights. He receives no direct remuneration. However, the man’s progress within the company and his basic salary frequently depend upon the research that he does. Indirectly he may receive something, but nothing directly tied to patents.

Shri Kashi Ram Gupta: In the latest memorandum, you have stated that 21 per cent of foreign investment is American. May I know how much of it is due to such industries which are dependent on patent and how much of it is due to know-how and other factors?

Prof. Kilbridge: I do not think I can answer that question directly. American investment is almost entirely in manufacturing industries.

Shri Kashi Ram Gupta: What percentage of such investment is in patented industries?

Prof. Kilbridge: I am unable to answer that question.

Shri Kashi Ram Gupta: Is, in your opinion, the present Patent Act of the Government of India quite suitable?

Prof. Kilbridge: I believe, the existing Patent Act is comparable to the Patent Acts of other developing countries and, generally speaking, quite acceptable to the American business community.

Shri Kashi Ram Gupta: In the Bill it is written that the period of protection will be counted from the date of completion of specifications which is an improvement and which means actually 16 years. What objection do you have to this particular clause?

Prof. Kilbridge: There is no provision for extensions.

Shri Kashi Ram Gupta: Is it a fact that most of the American investment is at present due to the supply of know-how and not because of patents?

Prof. Kilbridge: It is a very difficult question to answer. In all American financed factories and joint ventures I have visited in India, I think all of them require a considerable import of know-how. I cannot visualise any of them having been done by import of capital alone.

Shri Kashi Ram Gupta: In which of the developing countries the Patent Act at present is more attractive to American capital compared to the Indian Patent Act?

Prof. Kilbridge: The Latin American countries, of course, traditionally, get the lion's share of American foreign investment. This is more due to other factors and not due to the Patent law. On the sub-continent, Pakistan, to use a nasty word, has in the last ten years received a larger percentage of investment of private capital from the United States than India has. This is not, however, because of patent conditions or patent laws. I think this is because of the aggressiveness of the Government in seeking foreign private investments and the concessions they have made to private investments.

Shri Kashi Ram Gupta: Are you aware of the fact that in the last 15 years, other European countries have invested more in drugs and medicines here in India, than America?

Prof. Kilbridge: I am not aware of that fact.

Shri Kashi Ram Gupta: You have mentioned in your memorandum that research has been centralised up till now. How will you be able to decentralise research if the Patent Act is changed according to your suggestions? Now the research is done there at home. How will you be able to see that the research is done here in India?

Prof. Kilbridge: Some large international corporations I am familiar with are now planning a decentralisation of research and development activities. It is well known that one can run a research establishment in India considerably cheaper than one can in the United States. Also, one can use indigenous materials in the research effort. One can also consider manufacturing processes in the development effort which are appropriate to Indian conditions and one

can then develop a manufacturing complex to produce products suited to Indian conditions. American research is conducted on American needs and problems which are not necessarily the needs of India. American research is conducted on the basis of raw materials available in America which may not be available here. Therefore, when we import into India these technologies we necessarily import raw materials which means a continuous drain of foreign exchange for the import of raw materials to run a factory and produce a product which could possibly be made in other ways if the research and development had been started here in India.

Shri Kashi Ram Gupta: So far as research is concerned, it comprises of not only the patent side but also the know-how and technology side. Patent is only a part of it. Therefore, even if the Patent Law is not amended according to your wishes, research can be carried out in this country in a decentralised way.

Prof. Kilbridge: Yes. I think so. The Indian scientists are available. There is no reason why a pharmaceutical company cannot set up a research plant in Delhi and have it as a base for manufacturing new products in India. I think it is coming.

Shri Kashi Ram Gupta: In your country most of the industries are very largely based and they have got their own research establishments which have recurring expenses which are treated as revenue expenditure. These expenses are part and parcel of the whole business and dividends are worked out after deducting these expenses and also income-tax. Therefore, how can this old theory stand, that a scientist who invents should work it out individually and then give the know-how etc? What is the basis of such an argument?

Prof. Kilbridge: What you say is quite true. Most large companies budget a certain amount of money

annually for research and development programmes. This is considered an annual recurring expense. I do not try to justify patents on the basis of the individual researcher being paid for disclosing his information to society. The argument rests more soundly on the opportunity for the company to recoup cost of research and development. There is an equation in the minds of management between how much they can afford to spend on research and development annually and how the patent protection is allowing them to recoup a certain amount through profits over time. We do not know how long it will take to develop a particular product or process. Research is a very uncertain kind of thing. Many research and development projects are launched and a certain amount of money is spent. Many products are sold; many processes are up-graded and improved and certain profits are made. A balance is struck between what you can afford on one hand and what you receive on the other. This balance is based largely on the country's patent protection. Certainly, if in the United States there is a shift in our patent protection and the period is reduced, we will have to put less money in research and development because less can be supported on the basis of profits. This is what would happen in any country.

Shri Kashi Ram Gupta: There is a model law given for developing countries. I think, you must have studied that model law. This model law contains a note that a patent can be for a minimum period of 10 years from the date of the grant of a patent. Do you agree with that?

Prof. Kilbridge: I have seen the model law but I am not a patent lawyer.

Shri Warrior: I only want to ask one or two points. I wish to know your reaction about the protection to process and the protection to process-cum-product or product alone.

Prof. Kilbridge: Can you be more specific?

Shri Warrior: Under this patent law which we are now considering, we think that the protection should only be given to processes and not to processes-cum-products or products alone. What is your reaction to it?

Prof. Kilbridge: I think I am being asked to make a distinction between process-cum-product and product alone. The distinction is difficult in some cases and easy in other cases. Sometimes, it is possible to circumvent a patent by achieving the same end by different means. If the product is patented but not the process, this would not be successful. In another case, it is possible to use the same process and turn out a different product. If the process is patented but not the product, this would not be successful. It depends on what you try to achieve.

Shri Warrior: The object is this. When the process-cum-product is patented and patent protection is given, naturally that comes in the way of inventing new processes and new discoveries. Then, that also gives an additional advantage to the original patentee in the form of extension of his same process by adding something or omitting something after the lease of protection for the prescribed number of years is over. That is what is happening thereby creating a monopoly for long periods and precluding others from coming into the field.

Prof. Kilbridge: I see your point. The process can be patented. In an attempt to make the same product by different processes, in many cases, an improved process has been found. It could give opportunity to people for searching for a better way of doing the same thing. In many cases, a search for a new way has been a search for a better way.

Shri Warrior: About research, I wish to ask one very simple question. Why

is it that under the existing Act, when it is better than the enactment contemplated now, even with all those facilities for research, the foreign investors have not developed research in India so far. Only the products are being imported here and sold in the Indian market. The manufacture of the products of which the know-how is with them has not taken place here. What is your reaction to this from the Indian point of view? You have been here in India for some years.

Prof. Kilbridge: There are many reasons why foreign private investment has not flowed into India more rapidly than it has. I am sure you know them.

Shri Warrior: Not investment. I specially asked about research. No research has been done and no manufacturing has been done here. They have been keeping their patent rights with them and importing only the end-products and marketing them here. As you have suggested in your memorandum, you have found out that only in the petroleum industry, the refining and manufacturing is done. But in the pharmaceutical industry and other industries, even now the old system continues.

Prof. Kilbridge: Certainly, it is to India's advantage to have manufacturing done here rather than to have the product imported. It is to India's advantage to encourage foreign investors to bring their manufacturing plants here and to produce products for the Indian market. It is certainly advantageous for India to have research and development done here rather than to have products imported from abroad. But this is happening very slowly. There have been problems within India. There is the question of foreign private investment. You say, under what conditions, you are going to accept it. The Indian view on this has been ambiguous. Sometimes there is a shift in thinking. There is the problem of foreign exchange. Recently, the exchange rate

has been revised. There have been various other restrictions and controls. There have been disincentives to foreign investors for coming to India. I do not think the patent law has had much to do with it. Of course, patents may have had little to do with it in the past, but in future it may be that patents will have much to do with it. According to the trend today in public policy in India, there seems to be a renewed desire to attract foreign private investment. Just at this time we should not, it seems to me, take a retrograde step on the patents front.

Shri Warrior: One general question about incentive to private capital. Don't you think that such a large population as 49 crores of people is an enough incentive and a more assured market than a patent protection?

Prof. Kilbridge: The market in India, although it is very large, is also very poor. The total population is about 480 million. But the purchasing power is very low. It is still a fairly small market for many things. But I will say that I believe that the strongest inducement that has attracted foreign investment into India has been the potential of the Indian market, which is larger than all of Latin America and Africa combined, and as the purchasing power of the market grows, the manufacturers can see here a tremendous propensity to consume and they would like to serve that market.

Dr. C. B. Singh: On page 2 of your original statement, you have mentioned in para 1 that the Patents Bill 1965 as it now stands is a harsh and discriminating instrument, and that in the long run it may hit industrial development, retard inflow of foreign private investment and impede transfer of technology from industrially advanced countries. These are your words. Don't you think that these are very harsh words? May I put it to you that the comments by you are rather harsher from that point of view?

Prof. Kilbridge: I don't think in my new statement, written some two months after this, that I have reused the words "harsh and discriminating". However, I don't retract them.

Dr. C. B. Singh: I am glad you have modified them. You have got to remember that in our country, we are developing our own industrial policy and it is not a capitalistic country like the one which you represent. We have got our own democratic socialism. So our patent system has got to be on that main basis of socialistic democratic set-up. You have been here for more than two years and you know that this is a very poor country. Under these circumstances, do you think that the present patent system is more useful as compared to the new one and that the new Bill that we have brought forward is not desirable? That is what you think?

Prof. Kilbridge: Yes, I think that the proposed Patents Bill is less desirable than the present patent law. India is a very poor country. This is why economic development is very essential to the country. Industrial development will depend, not entirely, but to a large extent, upon foreign capital and foreign know-how. That may be seen from the history of all developing countries. Even America, for her industrial development, imported British capital and British knowhow.

Dr. C. B. Singh: My most important point is about pharmaceutical and chemical industry. I am concerned mostly with that. Most of my friends here are mostly concerned with high prices for these pharmaceutical drugs. You probably know that we have got a very important public sector here where we have invested more than Rs. 2,500 lakhs in three important projects at Madras, Rishikesh and Hyderabad. Do you still believe that the patent system should be more strict keeping in mind that we have such a big public sector project where we are, before long, likely to be self-sufficient in the pharmaceutical drugs?

Prof. Kilbridge: I fail to see the connection between the size of the public sector and the need for patent protection, unless it is envisioned that at some time in the near future, the entire food, drug and pharmaceutical industry and chemical intermediates will be in the public sector. . .

Dr. C. B. Singh: No, that is not the idea I am not suggesting that, as we are going to encourage the private sector as well. The point is, in view of this large public sector and a still larger private sector, will it serve our purpose if we have a separate section altogether dealing with pharmaceuticals and chemicals. The present Bill has sections where it deals with pharmaceuticals and chemicals along with food as well. Will it be all right from your point of view if we have separate sections altogether dealing with pharmaceuticals and chemicals and food drugs?

Prof. Kilbridge: I am not a patent lawyer and I just do not know the implications involved in the administration of two patent laws, one covering pharmaceuticals and chemicals and one covering other drugs. This kind of question may be referred to patent lawyers who are specialists in the administration of patent laws.

Dr. C. B. Singh: One more point about the right of appeal. In our patent Bill, there is no right of appeal beyond the administrative machinery given by the Government or the Drug Control Act. You have not said much on that point. What is your view on that?

Prof. Kilbridge: I think I have pointed out in my testimony briefly that it seems to be inconsistent with the general Indian policy of judicial appeal and that it seems to be rather an arbitrary way of deciding an issue. More consistent with the Indian democratic processes, it seems to me, would be an appeal board and an appeal judge of some sort or to put these issues into a judicial channel.

Dr. C. B. Singh: Now it is common knowledge that hardly much money has been invested in research in this country either by the private sector or even by Government. Do you think that a strong patent system is likely to attract more capital for industrial development?

Prof. Kilbridge: I think that, in general, a strong patent system has the effect of encouraging research and development and that therefore, there would be greater investment in research and development.

Shri M. L. Jadhav: How many patents does your country hold in India and how many patentees are manufacturing their products in India?

Prof. Kilbridge: I do not have that information.

Shri M. L. Jadhav: Do you agree the price of patented medicines in India is much higher as compared to the international price of the same medicine?

Prof. Kilbridge: I do not think there is such a thing as an international price for a given drug. It must differ from country to country. My own experience after living here for two years is that the retail price of drugs in the chemists in Delhi is cheaper than they are in Chicago or Washington.

Shri P. K. Kumaran: On page 7 you say:

"My experience in India during the past two years convinced me that, although the cost of basic drug manufacture was higher in India than in the United States, mostly because of the higher cost of raw materials and the unecological scale of production, still consumer prices were lower."

Have you got any factual data on the basis of which you arrived at this conclusion?

Prof. Kilbridge: This is purely a personal observation. In the presentation of my testimony for the record,

I did not give that statement. Not because I had changed my mind, but because I had made a personal observation and I had nothing to support it. I have no survey or extensive data to support it.

Shri P. K. Kumaran: During the years immediately following the first World War, The American pharmaceutical industry which was in a lower stage of development took full advantage of the patents registered by Germans in that country and developed the industry. If so, do you think the Indian industry should be denied such an opportunity of utilising the well-known formulae, etc. and developing?

Prof. Kilbridge: I am not familiar with your observation about the behaviour of the US drug industry after the first war. As I said, I do not represent the drug industry here specifically. I represent the United States Chamber of Commerce. I am not familiar with your observation and I have no comment to make on it.

Shri Peter Alvares: You had argued from the point of view of technological development as well as industrial finance. A reference has been made here to the particular political economy that our country wants to evolve and develop. In this context, various political economies are being responded to in different manner. Developing economies are now coming together under an Asian Development Bank in which developed nations are investing. Again, the UN has asked all developed nations to pay 1 per cent levy upon their national income. If the responses are so varied, why is it not possible for the foreign investor to consider developing the industry in India by even permitting the abrogation of the patent law as was done in Russia and Japan until they developed their own industry?

Prof. Kilbridge: Unfortunately the individual industrial investor looks upon his investment as an opportunity

to make profit in the long run. His social instincts, although they may be highly developed, are I believe, secondary to his instincts as a businessman; whether he is a foreign investor or Indian, the basic motives are the same. Accepting these motives, we have got to ask ourselves, is a mixed economy such as India going to be successful in developing industrial enterprise if they refuse to acknowledge the motives of free enterprise?

Shri Peter Alvares: You have talked about the incentive for foreign investment. The Reserve Bank of India Bulletin for May, 1965 reveals that the investment of both the UK and USA in India drew the largest profit in India than in other developing countries and even in the investing countries, i.e. U.K. and U.S.A. So far as UK's investment is concerned, the profit in India was 8.8 per cent, all other countries average 7.9 per cent and domestic, i.e. in UK itself 7.8 per cent. Similarly for USA's investment, in India the profit was 11.9 per cent, all other countries average 10.2 per cent and domestic, i.e. in USA itself, 9.1 per cent. Therefore, it is not proper to argue that there should be a proper climate created for investment by maintaining the old anachronistic patent law.

Prof. Kilbridge: Are these profits that is, profits after deducting all taxes?

Shri Peter Alvares: In one case, it is net profits. In the other case, it is profit on investment. Whatever it is, the ratios are similarly worked for the different countries.

Prof. Kilbridge: It is difficult to compare the profit margin from country to country, from industry to industry. I have one set of data from the Reserve Bank of India and another from the Commerce Department of the US. I have tried to work

it out and I did not get very far with it. Even if we accept the figures given by the Reserve Bank, to get a return of 8.8 per cent in USA is fairly easy, while on 11.9 per cent profit in India is realised with much greater risk than in the United States and with much greater trials and tribulations.

Shri A. T. Sarma: You have mentioned in your statement that foreigners may not invest money in India and open factories if more protection is not provided in this Bill. What is the kind of protection that you require?

Prof. Kilbridge: I say that if the present patent protection is greatly weakened, it may influence the rate of inflow of private foreign investment. I did not argue that the present patent law retards foreign private investment.

Shri A. T. Sarma: What is your specific suggestion in this matter?

Prof. Kilbridge: I plead for no more protection than the present protection. I think the present law needs some changes but not such drastic changes.

Shri Dalpat Singh: You have objected to the provision in the Bill which reduces the time during which a patentee can enjoy the benefits of his patent. In view of the fact that marketing facilities have increased in recent years, what do you think should be the time limit for the patentee to get full benefits of his patent?

Prof. Kilbridge: It varies from patent to patent and country to country. I think it would be better if India adheres to international standards in this respect. After all, it is not only the condition of the market which determines the rate of return. The problem is as much the scale of manufacture and the rate at which one can produce the product as much as the sale of the product. If a unit works one shift instead of three shifts it will take three times the period to get full return. Similarly, if it works

for half a shift, it will take six times the period to get full return on investment.

Shri Bade: On page 4 of your memorandum you say:

"Clauses 87 and 88 of the Patents Bill, 1965, provide that all patents for foods, drugs, and their chemical intermediates will be endorsed as 'licenses of right', and that where an endorsement 'Licenses of right' exists any person wishing to work the patent in India may require the patentee to grant him a license on mutually agreeable terms, or on terms decided by the Controller of Patents in the event of disagreement. These clauses, in effect, virtually deprive the affected industries—and especially the important pharmaceutical industry—of their patent rights, throwing open these patents to any number of applicants without regard to their financial or technical ability to work them properly, and setting a ceiling on royalties rather than allowing for free negotiations based on the merit of the product involved."

Why do you object to this clause? Is it only because the manufacturer or inventor is put to loss?

Prof. Kilbridge: My criticism of clauses 87 and 88 is based on the fact that they deprive these industries—food, drug and chemical industries—of their patent rights, which I think is somewhat discriminatory. They virtually throw out all patent rights in these industries.

Shri Bade: Do you not think that during the last fifteen years of our independence the foreign firms have created monopolistic conditions by obtaining patents and exploited our country?

Prof. Kilbridge: I have the feeling that monopolistic manufacture in India has its roots essentially in the licensing system. This avoids duplication of

effort and controls the amount of money invested in various industries and limits the foreign exchange drain.

Shri Bade: Suppose a patent is granted in India for an American firm for both the process and the product manufacturers from Italy or Japan cannot come to India and compete with that American firm and that creates monopolistic tendencies at the cost of consumers.

Prof. Kilbridge: I agree that it is one of the functions of patents to have a protected market.

Shri Bade: Therefore, it is better to abolish the patent law and allow the manufacturers to compete as in Italy.

Prof. Kilbridge: In a situation in which you abolish all patents you may find no one coming forward to manufacture things.

Shri Bade: In Italy there is no patent law.

Dr. C. B. Singh: Because of that there is any amount of spurious drugs in Italy.

Shri Bade: In your present note you seem to have taken a different line from your previous note. In your previous note you had come to the conclusion that our present Bill amounts to abrogation of all patent rights. In that note you had objected to the license of rights, compulsory licence, provision of appeal, amount of royalty etc. In fact, you had objected to every section of that Bill. It means that according to you there should be no amendment at all.

Prof. Kilbridge: Are you referring to another statement made by me.

Shri Bade: You have given previous note which was circulated to us. The note which was circulated to us previously by the Chamber.

Prof. Kilbridge: Is it my note?

Shri Bade: I am sorry that is not your note. That is from International Chamber of Commerce.

Shri R. P. Sinha: I would like to put one or two economic questions because the witness is an economist. As the witness has pleaded that India needs an inflow of foreign capital and inflow of foreign technology; now, we have our own plans in which there is rightly referred that we would like to encourage the inflow of foreign capital and technology in a planned manner. Now Patents Bill is only a part of the incentive that is provided for the inflow of foreign capital as he himself said and the effect of the Patents Bill that he said in the Memorandum itself is more or less psychological. Now the real criterion for inflow of foreign capital will be the return on the capital that is available in India. Now our Reserve Bank has made a survey to which also the witness has referred about the return on capital by the various sectors of the industry. I will refer him to the November 1965 Reserve Bank Bulletin—he has referred to November 1964 Bulletin—pages 1697 and 1698. Since he will not have the bulletin with himself I will just read out the figures given there. Now it is stated that the profit after tax as percentage of net worth from medicines and pharmaceuticals is given as below—I will also compare with the general profit from the industry as a whole. Now in 1960-61 profit from medicines and pharmaceuticals was 17.2 per cent as compared from all industries 10.9 per cent. In 1961-62 from medicine and pharmaceuticals it works out to 16 per cent as compared to all industries 9.9 per cent. Now in 1962-63 the return from the profit after tax amounted to 11.9 per cent as compared to 8.6 per cent from all industries. In 1963-64 it is 12.7 per cent as compared to all industries 9.3 per cent. Now the witness will notice that the return from the medicine and pharmaceutical industries is higher than the average return from all industries. I would like to know this from the witness: Whether he is aware that of the 900

drugs in common use in India about 100 of them enjoy patent protection.

Dr. C. B. Singh: Even less than that.

Shri Bade: I am just giving an average and about 800 do not enjoy any patent protection. Now what I have been trying to find and I would like the witness to answer is: What percentage of this profit as included in the Reserve Bank Bulletin could be attributed to the patented medicines because after all out of 900 only one hundred have got patented protection. Now what is worrying our mind is that so far as the other medicines are concerned the average profit may be low but so far as the patented medicines are concerned the profit to us appears to be unreasonably high and as a result of the very high prices that the patent products are in a position to command the average profitability from the medicine and pharmaceutical is pushed up. This is what the feeling is, that is, because we have not been able to get any data separately of the profitability of the patent products from the non-patented products. Now that being at the back of our mind we feel that even if we weaken the patents system in this country it will not very much effect the returns on the capital investment in the medicine and pharmaceutical industry and, therefore, it will have no effect even if it has marginal effect, on the inflow of the foreign capital. If the witness could enlighten us on the point probably it will go a long way to remove our doubts.

Prof. Kilbridge: As far as specific knowledge of cost-price relationships in the medicine and pharmaceutical industry is concerned, you must please rely upon the witness from that industry who will be coming up next week. I would, however, argue we should not look at the return on investment as the sole criterion for attracting foreign capital, as the return on investment in under-developed countries is only one of several criteria. There are other factors like political climate,

social and political stability, the difficulties of doing business, the ideologies of Government, etc. These are things which also greatly influence foreign private investment, and return on investment is only one among them.

I have some information about drug prices in U.S.A. which shows that, as a matter of fact, the patented drugs have shown a consistent drop in prices in U.S. in the past few years. Let me read this news release disclosed today. It shows prescribed drug manufacturers have been holding the line of price in arresting the nationwide inflationary trend. Figures during 1965 show a drop in wholesale prices for prescribed products on average of 1 per cent annually since 1961. Drug products covered by patents have shown an even more consistent drop of 8 per cent during the same period. It is a fact which belies the recent criticism in that under the modern patent system non-patented drug items have experienced an increase slightly more than 2 per cent. This again is a bewildering statistics to those who argue that the patent system is causing increasing prices. But again I would beg of you to ask this question of the drug industry people.

Shri M. R. Shervani: I am sure that the intention and the motive of the Indian Parliament while enacting this is not to retard industrial growth. Sometimes, we enact these to stimulate industrial growth and sometimes to restrict social evils.

In this Bill regarding patents, an effort has been made to plug the loopholes and to improve upon the present law. In your opinion, this new Bill weakens the existing law. As far as I can see, there are two points to which most vigorous objection is being raised. One of them is the shortening of the period.

I personally feel that it is in the interests of industrial growth because if you shorten the period of patents, then two or three years more are given

to others to be able to set up those industries, and that will stimulate industrial growth in our country.

The other point is about the compulsory licensing. Here, I want to understand from you what the fear of the foreign investors is. For, as an economist and as an industrialist myself, I know that merely owning the patent or the process is not enough for anybody to be able to put up the industry, because technical know-how is much more important than the patented process, and I, for one, would never attempt to invest my money or encourage others to invest their money on the starting of an industry, merely because I happen to have the patent or those others have the patent. Unless and until I have the technical know-how and the assistance etc. which would be required from the originator or the inventor of the patent, I would not attempt to start an industry. I must rather go out of my way to give him whatever he wants in the shape of royalty and so on so that I may ensure the smooth working of my factory.

This provision that has been made here is for the purpose of restricting the evil of exploitation by a greedy patentee who would not grant a patent just because a competitor has come into the field. In such a case, the Controller of Licence will certainly examine the technical ability, the financial capability etc. of the person concerned, before giving the licence. As regards the fears that you have mentioned at page 4 of your memorandum, namely that if this compulsory licence is given, then any number of applicants could have the licence, I would submit that certainly and surely, no Government would like to waste the internal capital by issuing licences to half a dozen people or a dozen people without ascertaining their technical and financial ability to set up the particular industry.

I want to know from you what specific fears the foreign investors have

in this regard, for, to my mind, these things are not only in the interests of the country and in the interests of industrial growth, but they are also in the interests of the foreign patentee or inventor; they do not harm the foreign patentee or the foreign investor in any way, because in spite of the process being known, somehow most of the industrialists would like to have collaboration. And we do have already collaboration in our country in fields where there are no patents. For instance, take the petro-chemical industry, and several other industries where there are no patents. I have myself started a dry battery industry where there are no patents, but I have collaboration with a British firm and I am paying royalty to them, because I want to have a smooth working of my plant and also quicker production.

So, what is the fear that you have in your mind?

Prof. Kilbridge: I must say that I am sure the Indian Parliament has no desire to frustrate industrial development and that this patent law is introduced not for that purpose, and that this is the farthest thing from your minds. But I have a fear, however, that we may be doing the wrong thing for the right reason, and no matter how good the purpose of the Bill may be, it may serve just the opposite end.

To argue that since a patent can be worked easily without the needed know-how and management techniques and that, therefore, a patent itself has no meaning is really to argue against the patent system *in toto*. A patent, admittedly, is a necessary and not a sufficient condition for manufacture, but it is necessary.

Shri M. R. Shervani: What remedy would you suggest against a patentee who does not exploit the patent over a reasonable period of time? If you object to our clause, then what alternative remedy would you suggest against this evil of exploitation for

personal profits for a longer period than is reasonable?

Prof. Kilbridge: The licence of right to my mind creates the possibility of too many manufacturers starting production on less than an economic scale and competing for a limited market and for limited raw materials.

Shri M. R. Shervani: I am sorry I have not been able to follow your answer.

Prof. Kilbridge: The question asked previously was why there should be objection to the licences of right in view of the fact that Government would not be likely to license a person who is not capable of producing and who does not have the funds, the technical skills and so on.

Assuming that the provision is properly administered and that everybody who applies for a licence of right and is so granted one can indeed produce efficiently and does have the capital to do so, then there may be too many people producing the same item. To resolve this, I would like the economy of operations to be kept in view. Larger factories can generally produce things cheaper than smaller factories. So, we have both the cost-price relationship and also the economy of operation in economic development as criteria in trying to decide whether we should allow controlled monopoly for the purpose of economy of production or whether we should allow competition for purposes of economy of production.

Mr. M. R. Shervani: The basis of private sector is competition. So, the private sector is not afraid of competition. On the other hand, the private sector welcomes competition, because thereby the quality improves, and the costs are brought down and production increases. The U.S.A. certainly would not favour controls and monopolies. You have a free economy in your country where you compete, and you are progressing through that

system. So, where is the fear if too many people start producing the same product?

Prof. Kilbridge: If the system were totally free and open then the fear would not exist, because then the market would handle things. But in India where there is a controlled economy and a planned economy, the private sector really does not function or operate as dependent upon the market but as dependent upon Government. A man who has a factory running on one shift, if he sees a competitive licence issued to somebody else to set up a similar factory and run one shift in competition with him, when his factory requires operation on two or three shifts, is unfairly treated.

Shri M. R. Shervani: But you have not answered my question. My point is this:

In the present law, we have given a certain limited period for exclusive exploitation of a patent, and now we are seeking to reduce that period by two years or four years in the case of drugs and medicines. My question was: What alternative remedy would you suggest to prevent the evil of exploitation for a longer period than what we have suggested? We say that if a patentee does not start manufacture but is exploiting it by import of the patented product, then compulsory licence will be given to anybody who is capable of producing that product. We do allow a patentee to exploit his invention or his product for a certain period, and it is only after that that the Government of India would give or grant any compulsory licence.

If you do not approve of that, then what alternative suggestion have you got to prevent this exploitation for a longer period than is allowed in the Bill?

Prof. Kilbridge: Talking to the narrow point of what should be done about a patentee who does not exploit

his patent and who prevents it from reaching the market, and to that point alone, I would say that there are several examples in international patent law that we could follow. I have no particular argument for any one of these, but I do sympathise with the position that the patentee who has no desire to work his patent may have his patent revoked or cancelled.

Shri Balkrishna Wasnik: In your statement at page 7 you have stated that the existing Indian price control legislation is adequate for direct action, if that is thought necessary. Could you elaborate this statement?

Prof. Kilbridge: We have had price controls in India on pharmaceuticals, since, as far as I can recall, about the middle of 1963. Controls were introduced under the Defence of India Rules. I understand the Defence of India Rules in respect of control of drug prices is no longer applicable, but that a new way of achieving the same thing through an extension of the Industrial Resolution, or some such instrument, can be used for continuing control, and, in fact, has been, or is about to be used, for the purpose of continuing the control of drug and medicine prices. This is a direct way of controlling prices. Considering all the factors that go into drug prices, the patent is one of the smallest, and you cannot control drug prices directly through patents.

Shri B. K. Das: You say that 4 per cent royalty is not adequate, and that it should be settled by negotiation. Can you give me an idea as to what generally is the percentage allowed in such cases?

Prof. Kilbridge: It varies all over the place. Usually it depends upon such things as the value of the product, the size of the market, the number of those licensed etc. Preliminary royalty rate may decline with time very rapidly; it may be 8 per cent for the first year's production, declining to 2 per cent after ten years. So, it is

impossible to generalise on it. The argument here is less aimed at the amount of percentage than at the principle of control.

Shri B. K. Das: But can you give the maximum percentage?

Prof. Kilbridge: There would be a limit beyond which the manufacturer would not get any benefit. That would be the maximum.

Shri B. K. Das: You have also said something about appeal to the court. Would you like if the appeal is to a special tribunal?

Prof. Kilbridge: I would think that it would be more consistent with the way you do things in India to have a tribunal.

Shrimati Sharda Mukerjee: About balance of payments you have said that if Indian private capital can have an alliance with foreign capital, we can thereby enter the world market, but we find that on the contrary some of the agreements are such that we are precluded from certain world markets either because of international trade agreements or because the companies with which agreements have been arrived at have put these restrictions. How then do you think that this will give India access to world markets? What world markets are you thinking of specifically, because international agreements, the European Common Market etc., would preclude us from those markets. There is also the Atlantic Agreement between America and Britain. So, which particular market have you in mind, and would the purchasing power of these markets which you are thinking of be really of any substance to India?

Prof. Kilbridge: The markets I have in mind are the markets of Southeast Asia and Africa more than the Continent or Western countries. This kind of agreement in which a collaborator is starting a factory with an Indian investor, giving him the patents, the

knowhow and so forth but precluding the possibility of his selling anything abroad, so that his own export programme from the United States and other countries is not affected, is a bad thing, and I decry it, and I hope that in future you would not go into such things, but enter only into such agreements which not only permit export of a certain percentage of the products but require a certain percentage of the products to be exported and thus put the burden for managing the export on the foreign collaborator.

Shrimati Sharda Mukerjee: Justice Ayyangar, at page 11 of his report, has made the following pertinent observation:

"These patents are taken out by foreigners not in the interest of the economy of the country, but with the main object of protecting an export market from competition from rival manufacturers particularly those in other parts of the world."

Therefore, it is in the interests of India to have this sort of patent law which would ensure security for her own manufacturers. Because the previous Act was unsatisfactory, these modifications have been made. I do not quite agree with this point you have made regarding the effects on our balance of payment situation, because as things stand at present, I do not think if we enter the international market we have a better chance than with collaboration. As far as the Asian markets are concerned, there also there are limitations.

Prof. Kilbridge: As far as entering the world markets is concerned, one reason why in many cases we have to have foreign collaborators is to ensure efficiency of production, quality of the product and international standards of products. It is extremely difficult for an Indian manufacturer who has not had the experience of meeting these standards to meet them by himself, to rise above the environment, as it were, to turn out a product of good quality.

The point about the protected market abroad for the foreign manufacturer, into which no one else can export if he has a patent, is telling. It is for this reason that I would urge India to insist on bringing the manufacturing facilities to this country and get the full advantage of the patent in terms of having the factory here. To do that, we have to set an environment which attracts the foreign investor. The patent law is only one small part of the whole thing.

Shrimati Sharda Mukerjee: May I put it to you this way? If your foreign capital were to come to India on fairly remunerative terms, you would probably have a much better chance in the Asian market also.

Prof. Kilbridge: Yes, I believe so.

Shri Shyamnandan Mishra: The economic basis of the learned witness for growth and development is quite clear. His whole approach seems to be based mainly on considerations for attracting private foreign capital. That being so, one is naturally tempted to ask whether any study has been made in the United States, anywhere, to indicate the extent of correlation between the inflow of private foreign capital and the patent rights granted; if so, we would be very grateful for getting the results of such a study.

Prof. Kilbridge: There have been some studies made, both through our Department of Commerce and the Business Council for International Understanding. I see that one of the witnesses who is going to be here next week is professor Meagher, who was with the Business Council for International Understanding and who I believe, conducted such a study. He considered not only patent protection but other factors as well and I would urge you to bring this question to him. I think, he will be able to help you. I can myself search for it and I can also refer it to him as I know he will be more able to put his hands on it than I.

Shri Shyamnandan Mishra: You have been very kind to give us very valuable information about many aspects of the working of our economy, but you were not able to give the information sought by an hon. Member here as to how many American patents based on the 21 per cent of the total of the private foreign investment here were working, but, surely, you would be in a position to give us some information about the working of patents in your country. How many American patents and how many foreign patents are working in your country at the moment?

Prof. Kilbridge: I can guess, but I am sorry I just do not know the specific number. I am an economist not a patent lawyer.

Shri Shyamnandan Mishra: Would you be able to send it on to us?

Prof. Kilbridge: I can search out the information for you.

Shri Shyamnandan Mishra: According to you, the proposed Bill seems to be of a restrictive nature. As a natural inference from this one would seem to think that the present law is more liberal in character. That being so, one would be entitled to think that on the basis of the present law there should have been a more liberal inflow of American or foreign private capital here. If the present law is allowed to stand as it is, do you think that there would be a better picture; if so, why did the better picture that you portrayed before us not materialise in the past? You have indicated that the total foreign private investment projected for the Fourth Five Year Plan is of the order of Rs. 150 crores a year or something like that. We had also projected in the Third Five Year Plan total foreign private investment of the order of Rs. 300 crores, that is, about Rs. 60 crores a year, but that did not materialise with the present patent law. Therefore, would you kindly indicate how you think that there could be a more hopeful picture

in the future if the present measure did not come about?

Prof. Kilbridge: As we all know, the patent law is one of many factors in the investment climate of a country. It is not the most important; there are other factors more important. These factors have in the past added up to a chancy, uninviting, climate for investment in India. It has changed from time to time this way and that, but *in toto* the investment climate in India has been barely acceptable; it has not been good. That is why foreign investment has not come in very fast. If we worsen the climate, we will get less foreign investment and if we improve the climate, we will get more foreign investment. There are many ways to improve the climate. Some things are being done right now to improve it. I can see them happening, even in the press. The Patent Bill is contrary to this trend. We can improve the climate for foreign investment in various ways and we can, at the same time, weaken patent protection. These could be offsetting elements.

I personally strongly believe that India should try to increase this inflow of foreign private investment. I think, it can do this with its present form of social democracy and planned economy. I do not think it is inconsistent with a socialistic pattern of development. I think, it is essential to bring in foreign capital. I just do not think that the balance of payments problem is going to be solved in the long run by foreign government loans. The interest burden on these loans alone is becoming formidable. India has got to find foreign exchange which comes in from the private sector. To do this we have got to make the finest investment climate we can make consistent with our principles.

I think, the patent system that India has now is consistent with these principles. It meets international standards. I think, the Patent Bill proposed is harsher than the patent laws of

other competing countries and cannot have anything but a detrimental effect upon the flow of foreign investment into India. I do not think that by any means the new patent law is going to hasten foreign private investment; it is going to slow it.

Shri Bibhuti Mishra: On page 3, line 5, of your statement today you have said:—

“Owners of patents are not free to fix a monopolistic price or to ignore the activities of competitors.”

Then, on page 6, last line, you say:—

“As with the balance of payments question, this private question is difficult to resolve precisely.”

What do you think to be proper to fix reasonable price in India?

Prof. Kilbridge: The meaning I had in mind in the statement on page 3 is that a patent does not grant monopoly in the sense that “monopoly” is normally used by an economist, in which you have one supplier and he has control over the market and the price the market will have to pay. There are competing products and competing processes for any patent and no patent is immune to new research and new development which can produce a newer and better product on better processes. So, a patent owner has a limited kind of protection and a limited kind of control during the period.

Shri Bibhuti Mishra: Monopoly means monopoly control. When one has got a monopoly control, we have a control for the prices, and when the price is controlled, the poor will be suppressed.

Prof. Kilbridge: We have also, as I mentioned earlier, the alternative use of price controls; the Government of India has very successfully used price controls in the past and, if necessary, may utilise it in the future.

Shri Bibhuti Mishra: Somewhere you have mentioned that the USA charges a profit of 10 per cent. I think a ten per cent profit is too high.

Prof. Kilbridge: I think I have been fortunate enough to escape that indiscretion. I do not think I have put in profit figures.

Shri Mehrotra: The prices of some of the drugs and medicines in America are less than those charged in India. In India the prices are more than those available in America. What will you suggest in order that the drugs may be available at a moderate price in our country?

Prof. Kilbridge: I do not have specific information of comparative prices, especially of medicines and drugs, as charged in India and in other countries or any cost of production figures. We have to refer to the Industry people who I understand have made a scrutiny and several surveys of the cost structures in other countries. I do not know that we should start with the assumption that the prices of drugs and pharmaceuticals to the patient in India are higher than they are in other countries. In my own experience, I found that the prices of certain drugs which I purchased while in India, for my children, were cheaper than the price in Chicago where I was previously. I think the industries people will be able to answer the question.

Shri Mehrotra: Some of the life-saving drugs are sold at a very high price in India and they are imported from foreign countries. Will this Bill be helpful to get those drugs at a cheaper price?

Prof. Kilbridge: I sympathise completely with the feelings of this body which has a strong desire to reduce the cost of medicines to the poor. I think it is essential for the Indian way of life and the Indian way of doing things, to make it possible for every man to afford the drugs that

he needs. I do not think that the patent bill is the best way of doing this. I think there must be more efficient ways of doing it.

Shri Sham Lal Saraf: The hon. witness represents the Chamber of Commerce in the USA. I want to combine three things in one question. Three things are discernible from the Patent Bill. Firstly, we have very poor knowhow, and certainly we cannot progress unless we can get the know-how and import it. The question is, on what terms can we do that. I would like to have your advice on that. How can we encourage the knowhow to come into this country at what is called a reasonable cost? Secondly, how can that contribute to our further knowledge and further research on the subject so that indigenous knowhow will also grow here? Thirdly, about the drugs and chemicals needed in the country, there is no scarcity for them, and we get them at a reasonable prices. Keeping that in view, as far as the provisions of this Bill are concerned, don't you think that these provisions, if they are kept as they are, will be conducive to fulfil all these objectives that we have before us?

Prof. Kilbridge: Let me reply to the first two points, and then ask for a restatement of the third one. The first question was, what is the best way to attract foreign knowhow for industry. I think the answer is obvious: capital. We have to throw money and knowledge and heart and skill all into it. Buy knowhow through collaboration; I do not think it can be done well without capital. Technical assistance and agreements that bring only foreign technicians to assist an industry are, I think, a flimsy way of attracting technical knowhow. The best way is the way that India is generally trying to do it: by bringing in foreign capital with collaboration agreements with Indian capital, and insisting on the training of Indian technicians and Indian managers by the foreign

technicians; by insisting also that as much of the research and development work that can be done in India should be carried out, here, so that the company develops an integrated business complex, as autonomous a group as possible within India, rather than a branch of a company which sends its research results abroad. I would like to see the growth of industry in the way I suggested. It has to capture the knowhow so that the people are trained and are made available to other companies as they move around within the industrial community and develop skills in a variety of different stations and circumstances. I think it is essential to do this.

Shri Sham Lal Saraf: From your reply I find that you have combined both the knowhow and the importation of capital. Cannot this be separated?

Prof. Kilbridge: They can be separated. I think it is an expensive way of doing things. We could start a factory in India without foreign capital, by using public loan money, or with free foreign exchange. We can hire a group of foreign engineers to come here and set it up for us and show us how to operate it.

Shri Sham Lal Saraf: The first question is, importation of knowhow; then there is the question of capital. It is up to this country to get that. Or, if the collaborator gets the knowhow and is able to manufacture the medicines on his own, well and good. If not, one may enter into collaboration. Do you agree to separate the two? These are two separate issues. Secondly, we have to get the knowhow and make the results available at a reasonable rate to the vast population. For this purpose, there are provisions in the Bill fixing the duration of a patent and the rate of royalty to be paid to the patentee. Do you agree with those provisions?

Prof. Kilbridge: As I said before, the royalty rate should depend on the circumstances of each case and is not definable in advance.

Shri Sham Lal Saraf: The Bill provides the duration of a patent shall be 10 years. Do you agree to that?

Prof. Kilbridge: 10 years is, I think too short a period for two reasons. It is inconsistent with international standards which are about 17 years on the average. Secondly, 10 years is not long enough in many instances to pay back the cost of research and development and setting up manufacturing facilities in India.

Shri Sham Lal Saraf: What about royalty?

Prof. Kilbridge: That should be negotiated in each case.

Mr. Chairman: In page 1 you have said:

"The patent system is an institution developed as an instrument of national policy to serve the nation's economic interest."

That has been the guiding principle of USA also?

Prof. Kilbridge: I feel that the patent law. Why should you object the nation's economic interests in the long run.

Mr. Chairman: Earlier your country took some decisions regarding the patent law. Why should you object to those provisions being made in India now? Ours is an under-developed country. I hope you have read the Ayyanger Report. I shall read out one passage from there:

"Mr. Langner giving evidence before the Temporary National Economic Committee of the USA which was set up in 1941, speaking of the American Patent system said:

"Patents are taken out in foreign countries (by Americans) for two main reasons. One is that we are doing business abroad and we want to protect our article, so that the German manufacturer or the English manufacturer is not able to copy it immediately and go into

competition with us. In other words, it is a great selling point for our goods to have a protected inventive feature and we have kept ahead of the whole world in the export markets through our patent system".

Again, Edith Penrose in his study entitled "The Economics of the International Patent System" has said:

"No amount of talk about the economic unity of the world can hide the fact that some countries with little export trade in industrial goods and few, if any, inventions for sale have nothing to gain from granting patents on inventions worked and patented abroad except the avoidance of unpleasant foreign relationship in other directions. In this category are agricultural countries and countries striving to industrialise but exporting primarily raw materials—

Ours is such a country—

"Most countries have little if anything to gain economically from granting patents to foreign firms; and they do so partly because the ideals of 'international cooperation', 'non-discrimination' and similar laudable statements have been influential in shaping the thoughts of lawyers and statesmen."

I have quoted from your own country. Do you agree with these views?

Prof. Kilbridge: I could hardly be expected to agree with the total picture.

Mr. Chairman: Is that because yours is a fully developed country and ours is an under-developed country?

Prof. Kilbridge: No. Indian interests should come first and no Bill should be passed on the basis of pleasing a foreign power. My interest in seeing that India has a good patent law is so that India attracts foreign investment which it needs for rapid economic development. I

worked for 2 years for our A.I.D. mission in which position I was largely responsible for the loan programme to India. I believe fully in Indian development. But I take a realistic view. I do not think public sector projects are enough for India's development. Foreign private investment is necessary and you do not get it merely by pleasing the Government of a country, but by pleasing the businessmen in that country. One way of looking at the American patent system is that the American patentee is trying to prevent competition in the Indian market from other foreign producers. Another way of looking at it is India is benefited if we can attract his factory to India instead of merely importing the product and putting up barriers against other products coming in.

Mr. Chairman: This committee is prepared to give reasonable protection, but for for extortion.

Prof. Kilbridge: No country should give protection for extortion.

Mr. Chairman: According to the report of the Reserve Bank, certain patented drugs are sold at 400 times the price. Is it not extortion? I can give certain examples. Gross profits after tax come to 14 per cent. 16 per cent. 17 per cent and so on.

Prof. Kilbridge: Then we have the super tax, tax on dividends, or remittances made, and so on.

Mr. Chairman: The main object of the patent law is to start manufacture in the country and to promote research. Suppose a patentee does not start a factory to manufacture it here nor does he have any research institute here. In such cases, if compulsory licences are given after three years, why should there be any objection?

During those three years he has got monopoly for importing the products and selling them at exorbitant prices. What protection can the country have against that?

Prof. Kilbridge: I think the patent should be used or it should be revoked after a period of time. otherwise I can see no advantage to India. When the country is providing all conditions necessary for manufacturing the product within the country, one should expect the foreign manufacturer to set up a factory in that country. If under the conditions made available he can make a reasonable profit, he should set up the factory in India and manufacture the items here.

Mr. Chairman: We have no more questions to put. Thank you very much for coming and giving valuable information to the committee.

(The witness then withdrew.)

(The Committee then adjourned.)

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965**

Monday, the 4th July, 1966 at 09.55 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

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2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
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13. Shri Braj Behari Mehrotra.
14. Shri Bibudhendra Mishra.
15. Shrimati Sharda Mukerjee.
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21. Shri Arjun Arora.
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REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

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2. Shri B. N. Atrishi, *O.S.D.*

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Shri S. K. Borkar, *Drug Controller of India.*

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Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department,
Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Verband der Chemischen Industrie E. V., Frankfurt am Main (Association of
Chemical Industry in West Germany).

Spokesmen

1. Mr. Georg Albrechtskirchinger.
2. Dr. Ulrich Heubaum.

II. Centre Europeen Des Federations De L'—Industrie Chimique Bureau, ZURICH.

Spokesmen

1. Mr. R. A. Willens, *Head of the Patent Department of Shell Chemicals,
London.*
2. Mr. J. Egli, *Director of the Swiss Society of Chemical Industries.*
3. Mr. Haslam, *Head of the Patent Department Wellcome Foundation Ltd.,
London.*
4. Mr. D. H. Nowotny, *Delegate of Swiss Society of Chemical Industries,
Zurich.*

I. Verband der Chemischen Industrie E. V., Frankfurt am Main (Association
of Chemical Industry in West Germany).

Spokesmen

1. Mr. Georg Albrechtskirchinger.
2. Dr. Ulrich Heubaum.

(The witnesses were called in and
they took their seats)

Mr. Chairman: The evidence that you give is public and will be printed and published and placed on the Table of the House. It will also be distributed to the members of the Committee. If you want any part of

your evidence to be confidential, it will be printed and distributed to the members of the Committee. Your memorandum has been circulated to the members of the Committee. If you want to add or supplement anything, you may do so. Otherwise, members will ask questions.

Mr. Georg Albrechtskirchinger: Mr. Chairman and hon. Members of the Committee, may we, in introducing ourselves as the representatives of the Association of Chemical Industry in West Germany, say some words by way of introduction about our personal background? Dr. Ulrich Heubaum, sitting next to me, is a chemist and has a life-long experience in the planning and running of chemical productions. He is with the well-known Bayer Company in Germany and he has been asked to deal with chemical questions of importance which will come up during this oral evidence. I am a member of the Bar at Frankfurt and advise the Association of Chemical Industry on all questions of industrial property rights and related problems in the legal field.

We have pointed out to you in the memorandum which was submitted by our association, the Association of Chemical Industry in West Germany, in January of this year, that ours is an organisation which represents virtually all of the chemical industry in Germany with more than 2,000 individual member firms which represent all the companies engaged in the production of chemical goods of all types.

The President of our Association has asked me to convey to you, Mr. Chairman, and through you to all the members of this Committee, his most sincere and respectful greetings. We are indeed greatly honoured to be heard today by appearing before you and we consider it as an event without precedent that we, as representatives of a foreign country, representatives of a branch of industry of a foreign country, have been invited to come here and to be heard by your Committee, which is seized with a very difficult question indeed, i.e., revision of your present patent legis-

lation. We hope to be able to contribute some ideas and consider this invitation to be a remarkable example of open-mindedness and we feel that this sort of exchange of ideas across the borders is very useful. We are glad that today in this Committee room there will be some sort of dialogue between India and Germany, because as you know, the relationship between our two countries has always been cordial and is characterised by mutual respect and very good understanding of each other's problems.

The specific purpose of our being here today is not, in my opinion, to advise you but rather, I would say, to share with you our experience of the reconstruction of German industry, including chemical industry after two devastating wars, because the evolution of the last twenty years will shed some light on the issue which is before you. In view of this, we consider it to be our duty to be here and to communicate to you our suggestions and answer to the best of our knowledge any questions that you might want to put.

Since we have to do this in English, which is for us a foreign language, may we ask you beforehand to have patience and indulgence if during the course of questions some problems of communication may arise?

May I touch on our recent and contemporary experience in Germany. As you know, at the end of the second World War Germany was devastated. Our entire industry had suffered very severely. The persons who tried to get the industry back on its feet had to cope with every imaginable difficulty. In most cases they had to start from scratch. They were faced with a great many difficulty and restrictions which were imposed upon the

defeated country which were only gradually lifted as slowly the Federal Republic of Germany regained step by step its independence and its sovereignty. There is no need to tell you that today the Federal Republic of Germany ranks among the very top of industrialised nations in the world.

In retrospect now of this evolution of the last twenty years of German industry during its reconstruction period I believe that I should touch only upon two of the phenomena which were casual and characteristic of this reconstruction, and they are the role of patent protection during this period and technological co-operation with foreign countries. As to patents the facts are the following. By the end of the war, in the spring of 1945, patent protection in Germany had ceased to exist. The Patent Office at Berlin had closed its doors and there was no longer any opportunity to file anything and to get any sort of protection.

At the end of the war it was quite evident that everything in the country had broken down. There was no longer even the possibility of travel to exchange things to produce. Everything had to be done on a very small scale. The German property rights—of course, patent right is a property right; the lawyers like to call it the intangible property right—and patent rights abroad were as a rule by the end of the war confiscated as a consequence of the war.

This was the situation that Germany had to face and the responsible men in Germany in politics, in the economy and in the industry who tried to get things rolling again knew very well that the material aid from abroad which began to flow into Germany, thanks mainly to the American influence, and all the inventiveness and the potential of creative thought that was certainly still there in our country and science and technology

alone would not suffice. It was very quickly realised—this, of course, was based on experience—that the protection of inventive thought along the traditional lines of the patent system was a pre-requisite for an industrial and economic recovery. Accordingly, in Germany everything was done from the very beginning to re-institute the patent system and to make it work again.

At first provisional steps were taken to make sure that inventors could file their inventions. Then, by 1949 the Patent Office was re-opened and it began its traditional work of examination. The old Patent Act, which was originally put into force of law in the last decades of the last century and which had been changed several times according to the changes of the economy, was maintained in all its basic features; there was no substantial change.

Thus, from the very beginning of the industrial recovery in Germany the inventor could rely on the safeguards of the traditional, strong patent protection. This meant that under this protection new thoughts were readily disclosed and not suppressed, and research and development were encouraged. It also meant in our opinion and experience that thus a basis was given for an efficient industrial investment policy. In the face of almost total destruction and in a situation characterised by the lack of all material assets, the intangible assets which are dormant in any nation in the world at any time, that is, creative thought, could be brought to life in Germany, thanks to a very strong patent protection, which thus became a very decisive factor for the gradual growth and reconstruction and for the present strength of our industrial society in Germany.

It is equally significant—thereby may touch upon the second point which I have mentioned—that from the very beginning in the patent field

this sort of protection was offered to all foreigners—anyone in the world—who wanted protection of their intangible property rights in Germany. No discriminatory measures were taken in regard to applications, for cated German property during the example, made by nationals of countries whose governments had confiscated war or as a consequence of the war. The fact that Germany right after its defeat provided a strong patent protection at the time when the country was still in ruins encouraged the inflow of foreign technology, capital and know-how and relatively quickly Germany could again come to the basis of exchange of ideas and technology and re-tie the old links that had existed before the war because the foreign companies felt at ease to operate in Germany under those conditions of patent protection; they felt at ease to grant licences, to make known their know-how and very soon a very intense technological co-operation between Germany and a great many countries began.

As you very well know, now Germany has rather intense economic and industrial contacts with a great many countries, not only with industrialised nations but also with a great many countries which are in the course of industrial development and among those countries, fortunately, is also India.

In this connection, after this introduction, I might want to make one reference which relates also very directly to our experience. Our experience might shed some light on a specific problem which has been mentioned by your Government in the well-known report of the Secretary-General of the United Nations on the role of transfer of technology to under-developed countries. In this report your Government has stated in its official declaration that as a matter of fact 90 per cent of the patent applications which were filed in this country are filed by foreigners and that only 10 per cent are filed by Indian nationals. This fact is deplored by your Government.

As you might have seen in our memorandum, we touched a little bit on this issue. In this memorandum we tried to tell you that in our opinion this certainly is a situation that should be improved. We are of the opinion that as time goes on and there is more industrial development in India, no doubt, this ratio would change to the better, that is to say, there would be more Indian applications.

In this connection I wish to relate to you our experience. We have prepared for you a diagram on the basis of statistics of patent applications in Germany between the years 1905 and 1965. In this the patent applications are shown only in the form of a diagram but if you so wish I can give the exact figures for the last 10 or 12 years which I have with me. This diagram shows the total figures and then in two other lines, which are on this diagram, the applications are split up into "by German nationals" and "by foreigners". You will see that from 1905 onwards, at a time when Germany was already an important industrial nation in the world, the number of foreign applications was relatively high. This is shown through the line that you see at the very bottom.

I may draw your attention to the right side of the diagram, which deals with the period after the Second World War. As you can see, the broken line starts practically in 1949—the time, as you know, when the Patent Office began to work again, and there you will see that this period of German reconstruction after the war from 1950 on, is characterised by very sharp rise in percentage of foreign applications. I can give you the exact ratio of last year in this respect—and I quote here from the official statistics of the German Patent Office—in 1965, the percentage of patent applications filed by foreigners in Germany was 42.61 per cent. I may state only briefly—I do not want to burden you with all these figures; if the Committee so desire, we are

ready at any time to supply this material—at any rate, I may point out that, for example, in 1950 this was 16 per cent and there was a steady rise every year and this is not surprising to us. We tend to believe that in a highly industrialised country, the high percentage of foreign applications is precisely an indication that this area enjoys a great economic interest, that it is to be considered an area where there is progress, where there is evolution and where there are chances for a better future. In this connection, may I relate to you from my experience, may be now, based on exact statistics, that since the starting of a Common Market authority and the attempts to coordinate and to merge the economies of the six countries of Central Europe, the number of patent applications from abroad—and I mean from outside Europe including U.S.A.—in all these countries, especially in Germany which is the only examining country for patent applications in the Common Market area has increased enormously. As a result of this increase, the German legislator is now faced with the problem to simplify the procedure, because the German Patent Office is no longer able to bear the load of examining every single application that is made. Now this sort of fact in the Common Market area today where the number of foreign—and in this case primarily the United States—patent applications has increased so enormously and our Patent Office has practically broken down is again an indication that the economic progress in this area attracts the outsiders to come in and to operate in this market. I realise that for a country which has not yet reached this industrial stage, things might be judged little differently, but believe me, in reality in my opinion, there is also for India an indication that this great country with a large population is considered by any one who is well versed in the evolution of economics and technology as having a future. There is a future here and it is the intense economic interest of the area which is responsible for this more than anything else. From my

personal experience it seems to me that for an industrial country like Germany a percentage of almost 43 per cent of foreign applications in the last year is quite indicative and quite remarkable, and as you all know, may be other witnesses from other countries have told you already—this is not an exception at all. Netherlands for example, has almost 80 per cent foreign applications. There are great many countries in the world where you find a similar situation. It seems to me, this is one of the cases where a certain amount of patience is needed. The problem should not be seen exclusively from a pessimistic angle. There is much good in this.

Now, Mr. Chairman and Hon'ble Members of the Committee, may I again give you some material, which in this respect, is of interest. I have here from the official statistics of our Federal Reserve Bank figures which were published in the years 1964 and just recently in 1966, which show balances of royalties paid and received in the Federal Republic of Germany for inventions, processes, copyrights and so on and so forth. Now as you will have a look at this document—I would ask you to have a look at it—you will see that Germany today in the year 1965, arrives at a completely negative balance of royalty payments. As a matter of fact, if you look at last column you will very well see from 1950 on, when the negative balance was still very small—but this, of course, was due to other factors i.e. the receipts and expenditure were very small, because this was the very beginning of our industrial progress—it was very small in 1950. It has come upto 462. In order to explain to you this table in a correct and complete manner, I would attract your attention to the following. That upto 1962, in these statistics of our Federal Reserve Bank, also the payments for copyrights and similar rights were included. There seems to be, in fact there is no use when discussing technolo-

gical changes to include payments for things of that sort. I will ask you to consider the figures in 1963 and there you see in the second column the payments for copyrights and similar rights are listed. So if you take the figures of 1965, you would have to subtract 19 and would arrive at the figure of 300, which would mean that Germany has received in 1965 a sum of 300 million DMs for royalties. And if you look at the expenditure side, you would have to subtract 121, which leads you to 660. Germany, in other words, in 1965, expended 660 million DMs for payments on royalties. The negative balance, if it is corrected taking into account copyrights etc. would be minus 360. Well we can draw this simple lesson from this, in 1965, Germany which in ranking is far above placed amongst the industrial nations of the world in industrial output, paid more than double in royalty payments to other countries than it received. In spite of all the expenditure we have and all the efforts we make for research, because we are convinced—this is our personal experience—that you can neither build up an industry nor maintain an industry unless you devote a great deal of money and time on ingenuity, research and development—in spite of all this, we cannot run our economy and our industry without the help of countries that have more experience i.e. are more advanced, and if you draw the balance of payments, you will realise there is clear indication that we in Germany are more at the receiving end than at the giving end. This again, I think is a very interesting fact. I am glad that we are in a position to give you the latest figures of 1964 and 1965 which have just been published three or four weeks back.

I may say one thing more. Just as we do not consider the number of foreign applications to be a liability, we are equally not likely to regard this in Germany as a completely negative thing. It seems to us that you have to arrive at a sort of balance in any economy and in the exchange of

technology and science. Even where you do all the things that you can do yourself with the utmost efficiency, you have also to invite foreign cooperation. We, in Germany, would always be willing to depend in the chemical industry on the ingenuity and experience of Americans, of Swiss and of others and we would be only too glad to learn a great deal also from you. In chemistry, we would be at the receiving end in the sense that we would have a black-flow of your personal experience of some of the methods that we try to use here in India.

We wanted to show you the experience of Germany after the Second World War. Of course, it is an experience which you cannot just take and apply to any other situation in the world. I am completely aware of this. But there are certain parallels in the world. In spite of total destruction we had quite a few men who knew how to run industrial installations. I can assure you that if we had not taken these measures to protect these intangible assets, let me say like a small little flower that is just about to come out, it would not have grown into anything and the material aid which we had received later on under the Marshall Plan would not have been put into good effect. If we had not created this system which protected our own creative thought and—it is equally important—which encouraged the other countries and also our former enemy countries to come back and say, "Well, let us try again; let us arrive at technological cooperation" the Americans, the British, the French and all other countries would not have moved an inch. If they had not had the assurance that their know-how and their inventions have a very good and solid protection, they would not have come forward to cooperate.

We are dependent on cooperation. Today, in science and technology, there is the science which is worldwide. The science or the British science but it is the science which is worldwide. The knowledge must be communicated which is, after all, one of the ends of

the patent system. But the disclosure of the knowledge alone is not sufficient. Contracts must be made, experience must be communicated to others. This can only be achieved by a sound patent system.

Now, let me say a few words in regard to the Bill itself which, of course has been touched upon to some extent in the Memorandum which has been submitted to you in January. It is quite clear, as the representatives of the Association of the Chemical Industry in Germany, we are particularly interested in certain clauses of the proposed legislation which deals specifically with chemical inventions. However, one cannot look at all these things in such an isolated manner. We have to go into the provisions as such in their complexity and in their entirety. I have not the intention to repeat what I have already said. I would just briefly mention a few things which may have not come out clearly in our written Memorandum. Let me touch upon, very briefly, the provisions of compulsory licensing, working of patents and licences of right and revocation. That is all contained in pp. 4, 5 and 6 of our Memorandum. But let me make a few general remarks here. We have our experience in Germany. Of course, the system of compulsory licensing is self-evident in a way and the experience has shown that the temporary monopoly which is conferred by the patent—the legislator confers this monopoly for very good reasons—should be under some sort of control. Whenever there is an abuse or whenever there are overriding necessities, may be in public interest or for public welfare, legal measures must be taken in advance to guarantee that the invention which is patented will not be abused. This may be resorted to only in the case of abuse of the right conferred by the patent.

I may, however point out that there are other correctives in an economy which are, in our experience, more effective. One of them is com-

petition, specially when you touched upon the problem of prices which we shall discuss here sometime later. There is only the competitive element which works in an-automatic and efficient manner. Of course, we also have it and practically in all industrialised nations, there is some sort of legislation which deals with restrictive trade practices. It is quite clear that in this field of legislation of restrictive trade practices, you must also touch upon the issue of patents and industrial property rights. In Germany, we enacted the Restrictive Trade Practices Act in the year 1958. Without going into the details, the basic principle of the law is that any measure, any contract, which restricts competition or which falsifies the competitive normal market situation is, as such, not valid. Then, of course there are certain exceptions which have to be there. The authority which has been created for this purpose can make exceptions and grant permissions for certain agreements. This German law, in dealing with patent rights, industrial property rights, in Sections 20 and 21 says very clearly that all the licensing agreements as such are valid as long as they do not impose upon the licensee any obligations which go beyond the scope of the right conferred. Now, let me give you one very simple example. If I am a patentee. I can give my patent to Dr. Heubaum and allow him to run it until the year, let us say, the dates of expiration 1971. Under this licence contract, if I would obligate him to be bound to this agreement beyond the year 1971, this agreement would not be valid because it would go beyond the scope of my right. This is, of course, only a very simple example. Any licensing agreement which goes beyond the scope of the patent right is invalid. Now you see here again that the German legislation in a field that has nothing to do with compulsory licensing, which is of greatest importance in the Restrictive Trade Practices Act, has expressly permitted these agreements which after all are based on a monopoly

right. The legislation has clearly said that as long as these licensing agreements are within the scope of the right conferred to the patentee, they are all right. They need not be exempted; they need not be registered. They are all right. But I may tell you that there are certain restrictions of licensing agreements, restrictions which I would impose upon Dr Heubaum, referring to my example, that he would produce only in such and such a manner, manufacture the product in that and that quantity or only in that territory or only within a certain time. The restrictions of this sort by legal definition are within the scope of the patentee's rights. So you see that even in Germany where we have a rather strong law on restrictive trade practices, it had been found to be necessary and especially here the licensing agreements should be so to say exemptions should be so to say exempt. There are a few examples outside of this sphere, but they are not regarded as restrictive by legal definition. Furthermore, I may point out that the legislation has also provided for a number of cases where certain clauses in such licensing agreements may have to be registered with an authority who will issue the permission that they be practised. For example I am a patentee and I can give the licence to Dr. Heubaum. But I will not be allowed to oblige him that he should buy the raw materials and other intermediate products from me. But if I can prove, and if it is the case, that the flawless technical execution of this material which is protected, depends on this raw material which is under my control—in other words where there are technological reasons for it—then this sort of agreement is all right and the law does not scorn it. The legislation in Germany has been made with a great deal of care in these matters and the significant factors may be of great interest to you. I am giving you our own experience in Germany where the legislator in the Patent Act itself has re-instituted the traditional system of strong patent protection, where for developments after the war it was

thought necessary to have a very strong restrictive trade practices Act, where the legislator found it necessary to protect especially the industrial property rights by special clauses, because it is very well known that unless you do that—give a rather strong temporary monopoly—you will have no technological advance.

I don't want to comment at the moment on the individual clauses of your compulsory licensing system. I may point out that in Germany also we have a clause which deals with compulsory licensing and this compulsory licence is to be granted only where public interest requires it. In 1965, we did not have one single case for arbitration and I must tell you that applications for compulsory licence for reasons of public interest are very rare indeed, the reasons for this being that the law puts up a very high barrier of conditions which have to be fulfilled. In theory you find this almost in any patent legislation in the world, for example in your Bill also. Due consideration must be given however to the fact that the applicant for a compulsory licence will really be able to produce on a commercial scale the patented product. But of course, the jurisprudence of a certain country on this matter is of high importance in our view. It is mainly the jurisprudence which decides doubtful cases and which will put the accent on how a certain clause should be interpreted. Our experience in Germany with a very restrictive sort of compulsory licensing system, is that it is very difficult to get a compulsory licence. There is only one ground, public interest and no other. I know you are concerned with the problem of non-working of patents. I will come to that a little later. Our general experience would show that compulsory licensing is a fleet in being which should be there and must be there but there is no use having an arsenal of all imaginable weapons which should be wielded by

the Government authorities, which could be used by competitors, which could be used by practically anyone and which go very far in detail. In other words, a very detailed and elaborate system of compulsory licence will have a detrimental effect.

May I, Mr. Chairman and Hon'ble Members of the Committee, draw your attention to one particular point which is very much on my mind and, I will say, rightly so, because it touches in particular the entire chemical industry? This is the regulation called the "licence of right" which is found in your proposed legislation—sections 86 to 89. May I, Mr. Chairman, make a few remarks first as to the terminology, because there seems to be some sort of a confusion regarding the terminology. You are quite familiar with the Model Law of the United International Bureau for the Protection of International Property, which also deals with something which is called "licence of right". However, the licence of right which is proposed is of a completely different nature. There a provision is made which depends on the voluntary action of the patentee. A patentee can, if he so chooses, make a sort of a declaration, which will be registered duly by the authorities, to say that any one who wants to use the patent can use it on terms agreed upon. In Germany, we have a similar regulation in our law. It is, I believe, in Section 14, which we call somewhat differently. If I translate it in English, it means "willingness to grant licences". The Legislature, when it framed this clause, had the following reasons in mind: a small inventor, an individual scientist, may sometimes find the patent fees involved to be rather high; so it was felt that granting a reduction in the annual fees if he grants licences freely to the public, will be very helpful. Another reason is that smaller companies which do not operate so extensively in the market might have difficulties sometimes in finding adequate partners for licensing agreements; in most cases, if the size of the company is small, you will

need certain agreements with others to help you in production, distribution and so on, therefore, it was felt that a smaller company might find it helpful to have a sort of public notice that any one could come and ask for the licence. This is the concept of licence of right as far as we have understood it. If you so wish, I could also give an indication as to how many of such applications and notifications have been made in Germany in the last year. There were several thousands of notifications of this sort last year in Germany.

The system which is being proposed in your Bill is something complicated and if you permit me, I would not call it "licence of right"; I would call it "automatic licensing" because I speak here for the chemical industry. According to Section 89, any invention in the field of chemical industry will automatically be endorsed with licence of right and this in turn means that any one can immediately apply that a licence be given to him.

Shri Bade: Read Clause 90 also; that is also applicable.

Mr. Albrechtskirchinger: Clause 90 deals with "when reasonable requirements of the public deemed not satisfied".

Mr. Chairman: You referred to Clause 89; Clause 89 says:

"Where, in respect of a patent, a compulsory licence has been granted on the endorsement "Licences of right" has been made or is deemed to have been made, the Central Government or any person interested may, after the expiration of two years . . .".

Mr. G. Albrechtskirchinger: I am sorry I misquoted the Clause. Clause 89 deals with revocation of patents

after the grant of compulsory licence or the endorsement "licences of right". The Clause that I was thinking of is 87, which deals with certain patents to be deemed to be endorsed with the words "licences of right". That is what I should like to call "automatic licensing". There, of course, you have quite a few sectors of industries, for example, alloys, optical glass, etc., which are individual productions of certain industries. But in the field of chemical industry, no distinction is made. It is applied for the whole industry; the "licence of right" would always apply to it and Clause 88 regulates in detail as to how this will be done. Mr. Chairman and hon. members of this Committee, if this Clause is passed, the chemical industry will be completely under a different regime.

Mr. Chairman: Not to all chemicals; it is only in respect of substances used or capable of being used as food or as medicine or drug . . .

Mr. G. Albrechtskirchinger: May I give my interpretation of it? I refer to the Clause which I should like to call "automatic licensing". I would like to ask you to tell us whether it is correct or not. The clause which deals with "automatic licensing" has nothing to do with discrimination or a special measure with regard to the drug industry. It deals specifically with all inventions in the chemical industry totally. There is one additional measure which hits the pharmaceutical industry. In respect of a patent endorsed with "licence of right", royalty has to be paid; this royalty should normally be agreed upon between the patentee and the licensee and in case there is no agreement the President of the Patent Office, if I am correct, will have the right to arbitrate in the matter—to settle the terms. There, for the pharmaceutical industry, you have introduced in the proposed legislation a royalty ceiling of 4 per cent. This is the only difference. But we want to

make it clear to you that this particular Clause, Clause 87, puts the entire chemical industry in your country—all inventions in this field—under a completely different and special regime. What we want to discuss with you in detail is whether this is a wise measure.

Shri Bade: How are the chemical industries included?

Mr. G. Albrechtskirchinger: May I explain it to you? If I may say, your Sec. 87 reads:

"Notwithstanding anything contained in this Act,—

- (a) every patent in force at the commencement of this Act in respect of inventions relating to—

May I skip the first paragraph as also the second one and read (iii):

"(iii) the methods or processes for the manufacture or production of chemical substances including alloys, etc."

shall be deemed to be endorsed with the words "Licences of right", in the case of inventions referred to, in clause (a), from the commencement of this Act . . ."

In my opinion, it is quite clear and in Europe it is always interpreted in this way,—if I may say, I would be surprised if there were a difference of opinion—that the entire chemical industry will be automatically brought in. This is a legal obligation that you devise here. There is no administrative act needed. It will be automatically subjected to a special regime of licensing—as I call it, automatic licensing. Am I correct?

Shri K. V. Venkatachalam: That is correct.

Shri R. P. Sinha: It is only in respect of patents in existence at the commencement of this Act.

Mr. G. Albrechtskirchinger: No. It is for both. It is a technical question of phrasing in such a way that it applies to both sorts of patents, but both are specifically mentioned. I think I am quite correct in this interpretation: from the moment that you would pass the Bill in the way it is proposed now, any invention—I want to stress this again—any invention in the chemical field, no matter whether it is for drugs or dyes, would be treated completely different. What I would like to discuss with you is: whether this is a right thing to do? We do not believe so. I was surprised to find in the notes which accompany this draft law a very short explanation as to why this clause is included, that it is included in order to guarantee or to make sure that there will be a proper development of the food, drug and chemical industries in India. This is to say the moliration which has become apparent by the very publication of this draft law. I think you need plenty of time to discuss the meaning of this 'Licences of right'—this automatic licensing and what it would amount to. In our memorandum we have said a few words about it. You find there a short summary. We do regard it as a discrimination. When I say 'discrimination', it is not in any evil sense of the word. What I want to stress is that it is a different sort of treatment. We do not believe there is any basis for a different sort of treatment. As a matter of fact, we believe that the development of the chemical industry which is one of the basic and most important industries for the industrial development of a country would be sincerely endangered and probably made almost impossible if this sort of special regime of automatic licensing is imposed. The reasons for this, it seems to us, are self-evident. If you want to have an industry, if you want an industry to prosper, to make progress, in our experience, what you should do is to provide a strong patent protection for it. In our Patent laws usually, with very few exceptions, we have no

differential treatment. I will come to the question of processes and products protection in the chemical field which is a very special issue and has historical roots. It has to be explained in a calm manner. If you want any industry to prosper, you must provide for good and certainly equal treatment as compared to other industries. If you do not do this, the results would be: first of all, you would hamper the development of your own chemical industry. All the efforts now made to build up indigenous research, to build indigenous production units would be hampered by this sort of treatment. It would frustrate these efforts to a considerable extent.

Secondly, you would also restrict the inflow of the foreign element of technology, parting with inventions, probably also the setting up of chemical installations and production units in this country by foreign entrepreneurs. Also from my own experience, there is no use, in our opinion, for any country, less or more developed, to be sort of hesitant about foreign elements in their industry. One should not do this. One should regard this as a chance of further co-operation and further evolution and it seems to me that in India at the present stage, development depends to a large degree on foreign industrial companies' experience which after all, when they come here, incorporate themselves according to Indian laws and become Indian companies but they bring with them a lot of substantial knowledge and experience which will promote here industrialisation in a well-balanced manner and India will later on, in my opinion, quite clearly present a completely different picture and even when India attains considerable industrial development, she will always need and probably will welcome more and more collaboration with foreign industry. Germany has long since overcome this sort of apprehension that you might sometimes have and I am pleased to say that our

field of operation is no longer Germany but the European Common Market and many countries like France, Italy, etc. are no longer a foreign land for us. The Common Market has become an economic reality. In other words, automatic licensing, in our opinion, will have a disastrous effect on the building up of your indigenous chemical industry and on the very chance of making use of the foreign element for which there is a pressing necessity in India now.

I have taken a considerable time and I feel that I should restrict myself very much in elaborating further on the specific clauses of the Bill. If you so desire, may be later on during the question period, if any member desires to discuss any specific point, I will gladly do so.

I will only touch upon 3 or 4 general points. Let us take the term of patents. It should be pointed out and we have pointed out this to you several times, I believe, that the international trend is towards a period approaching 20 years and not for a period approaching half of it as it is proposed in your Bill. We have this trend in Europe. It is so in the draft European patent Law of the Common Market which has been discussed and not yet been realised. It will be of special importance to India. That the 29 years terms is also in the BIRPI draft model law. It is after all a law drafted for the countries in the process of development by representatives of industry of developed and underdeveloped countries to share their experience, and they also propose a term of 20 years. If you change it to 14, one might argue whether it is a decisive step or not, but to reduce it to 10 years for pharmaceuticals is especially bad, because it is quite well known that the period between the birth hour of an invention and the marketing of the product, for a number of reasons, is especially long in this

industry. There are a number of steps which are identical in every chemical invention, but in addition, in the case of pharmaceuticals, toxicological, clinical tests etc., have to be undertaken and this takes a long time. So, by reducing the term of patent for the pharmaceutical product further, in reality you reduce it by more than the number of years that are put down in the law.

The question of process protection and product protection has been discussed very often, but we should be very clear about the terminology. In Germany, for historical reasons, our patent law has always been process protection in chemistry. This is the English translation of section 6 of our law:

"If a patent has been granted in respect of a process, its effect shall extend to the products directly obtained by that process."

This, of course, is in reality not process protection, because this process protection extends automatically by legal definition always to the product which is the direct result of this process. There is a further safeguard along these lines in our section 47, para 3, which has also been in effect for two or three generations now, which reads:

"If the invention made use of relates to a process for the manufacture of any substance, then, until proof to the contrary has been established, every substance of the same nature shall be deemed to have been produced by the patented process."

In other words, if I have a chemical patent in Germany, which will be a process patent, and I find out that the product which is produced under this process by me is also produced by somebody else, an infringer, who does not have the right and I

sue him, it will be the infringer who has to prove that he produced this by another process, and unless he is able to prove this, he will lose the case. In other words we arrive at what is commonly called product by process protection. It is not process protection as such.

In the United States, for example, there has always been product protection for chemicals, as also in France since 1844 or so but in Germany process protection since our law was passed in 1876. This is due mainly to historical reasons, due to certain ideas that this would be better for the development of this industry, but if you draw any conclusion that because of process protection Germany has prospered more than, say, France, it would be very difficult to establish, because the factors which influenced its development are of a completely different nature.

I would like to express very strongly that if you do not include the sort of clauses which we now have in Germany, where the product produced immediately by the process is also protected and where the infringer will have to prove that he did not use the process in order to arrive at the product, you weaken the protection in such a substantial manner that the final result will be negative.

Shri K. V. Venkatachalam: Please look at Clause 47(1)(b) of the Bill where the protection extends to the product made by the patented process.

Mr. G. Albrechtskirchinger: I am not quite sure it does.

Shri K. V. Venkatachalam: Anyway, that is the intention. If I may say so, I would not like to go into it very closely now and we cannot at present give an opinion on it, because we have to study it very carefully.

I would like to look upon this in a more detailed manner and then let you know.

Mr. Chairman: Clause 47(1)(b) says as follows:

“Subject to the other provisions contained in this Act, a patent granted, whether before or after the commencement of this Act, shall confer upon the patentee—

(b) where a patent is for a process of manufacturing an article or substance, the exclusive right by himself, his agents or licensees to use or exercise the process in India and of using or selling in India articles or substances made by such process and of authorising others so to do.”

It is quite clear.

Mr. G. Albrechtskirchinger: May be, but, if I may say so, this would not be the moment to give a final opinion on it because it has to be carefully investigated.

Mr. Chairman: There is no ambiguity about it.

Shri K. V. Venkatachalam: Anyway, that is the intention.

Mr. G. Albrechtskirchinger: That is the intention, but it should be carefully studied to arrive at a wording which will be foolproof.

Shri K. V. Venkatachalam: Otherwise, a process patent has no meaning.

Mr. G. Albrechtskirchinger: I fully agree. I personally believe that it may be wiser at the moment to have a product protection for chemicals because science itself has changed.

On this, one can of course have different ideas.

Now, I would like to come to one of the most important points in my evidence, because we believe that the picture given so far would not be completed if we stop here. We have very much heard of the problem of prices, and in particular the prices of certain commodities, in the chemical field; in order to deal with the problem in an adequate manner, our experience in Germany shows—and that is also our experience in India, since, after all, the German industry is here and it has started work in quite an effective manner—that the factors of general chemical economics must be considered in order to appreciate the problem of the cost of production and of prices. My friend Dr. Heubaum has prepared a brief study on this issue which we hope will help to illustrate the point. With your permission, Mr. Chairman, I may request Dr. Heubaum to present this material to you and the Committee.

Dr. Ulrich Heubaum: In previous discussions on the proposed patent legislation in India, the subject of prices of chemicals in India and elsewhere has been repeatedly raised. We feel that it would be helpful to offer some material which is based on the experience of the German chemical industry engaged in the production of identical chemicals in Germany and in India. We have prepared a cost analysis which we think is representative for quite a number of chemical products in both countries and which may be seen in the diagram which is being distributed at the moment. This diagram deals with firstly agricultural insecticides and secondly with a group of general organic chemicals and lastly with a pharmaceutical compound. The products selected for this comparison are not patented which shows that the predominant reasons for cost differences of any of the chemicals produced in the two countries lie outside the patent field. The

results of such a cost analysis are shown in the diagram which we would like to submit to the Committee. In doing this, we beg you to understand that the actual production cost cannot be disclosed openly in a competitive market. For this reason, the cost situation is given in the form of a diagram wherein the German production cost figures are given as 100 per cent and the Indian production costs percentage-wise accordingly. The data and ratios given in the diagram are based on figures which serve to calculate the cost of identical productions in the different countries. May I ask you to look at the first example which is an insecticide? The production cost of this compound in Germany is shown by the column on the left-hand side. The comparative cost of the same product in India is shown by the two columns to the right which are based on the official exchange rates of the two currencies involved, before and after the devaluation of the rupee. You will note that before the devaluation of the rupee, the production cost of this insecticide in India was roughly 210 per cent of the German production cost. The devaluation would bring that down to approximately 135 per cent provided that no further cost-rising factors come into the picture such as rising prices for imported intermediates or manufacturing costs in India.

The second example deals with compounds needed in the rubber industry. The first column shows the production cost in Germany expressed as 100 per cent. The respective production costs in India amount to about 240 and 150 per cent respectively. In drawing a preliminary conclusion from these first two examples, where patent protection and therefore expenses for royalties do not come into the picture at all, it is not possible at present to produce in India at comparative costs. The reasons for this are manifold, one of them being higher cost for indigenous raw materials, not to mention the fact that production in smaller units is always more costly. The

effect of lowering cost by increasing the units may be seen in our third example which describes production cost ratios of a pharmaceutical compound where patents also have no bearing. Production costs in India are drawn in twin columns where by the columns designated with (b) represents a unit of a 50 per cent production increase, compared with (a). You will note that this production increase lowers substantially the production costs. In spite of this, it can be seen that the production in India is still at 400 or 250 per cent respectively before and after devaluation of the rupee. It may be noted also that customs and clearing charges for imported intermediates contribute considerably to the higher costs. Incidentally, these samples are representative for the complexity of organic synthesis in general with its multitude of production steps. It is characteristic for a great number of chemical processes, as for example, dye-stuffs.

May I refer in this connection to another diagram in which we will try to describe graphically the main steps involved in the production of a well-known pharmaceutical by the name of chloroquine which is used in the treatment of malaria and rheumatic diseases. The starting material for the synthesis of this pharmaceutical is Ethylene which can be found in the middle of the top of the diagram. From this raw material, two different series of production steps must be gone through which you will find in the left-hand and right-hand columns in order to arrive at the final synthesis after a total of 16 production steps. To render this picture complete, however, the introduction of other chemicals represented by arrows in our diagram into the production process must be considered. These chemicals in turn are the result of separate reactions which again require a number of production steps. To make the diagram simpler, the production steps are indicated by the number of arrows. The total of pro-

duction steps involved is about twice the number mentioned before; that means, about 30. Furthermore, the by-products which result necessarily in the course of the synthesis are not indicated. Incidentally, most of the intermediates are not shown by their chemical names in the diagram for reasons of simplicity. If you wish, the names of these various compounds can be given.

In Germany, the complete synthesis of such complex compounds starting from Ethylene presents no problem at all for any chemical company, because either all the chemicals needed are produced by the company itself or are readily available in the domestic market. The manufacturer may choose whether he supplies or buys the various chemicals needed in the production. Let us now turn to the possibility of synthesising the compound in India. It would, of course, present no difficulty at all to an experienced chemist to perform this synthesis on a laboratory scale. To produce, however, this compound on a commercial scale, which means also at reasonable cost, sufficient quantities of all intermediates must be available. Experience shows in this and some similar cases that all the chemicals needed are not available here at a reasonable price. In order to produce such a commodity commercially in India, the manufacturer under the present conditions is compelled to restrict his synthesis to the last steps. In spite of this, as our previous diagram has shown, the production cost of chloroquine in India, which is actually the pharmaceutical we have been talking about, is many times higher than the corresponding cost in Germany. Should the manufacturer in India now attempt to make the total or a substantial part of this synthesis in India, the production costs would be even more unbearable. As has been mentioned before, the chemical industry in India seems to be handicapped at present by lack of sufficient raw materials and chemical intermediates at competitive prices.

To illustrate this may I mention some examples? Ammonia, the basic chemical for nitrogenous fertilisers and an important precursor for many chemicals is still about 6 times as expensive in India as in Germany. Likewise, nitric acid, the derivative of ammonia, is about $5\frac{1}{2}$ times more costly in India. Caustic soda, an important product of brine electrolysis costs $2\frac{1}{2}$ times in India as compared to Germany. Similar relations are true for intermediates such as carbon-disulphide, an important reactant in the rayon and rubber industry, the price of which is $5\frac{1}{2}$ times more than the world market level. Most of the compounds irreplaceable in the manufacture of chemicals and auxiliaries are $2\frac{1}{2}$ to 3 times higher here in India. Some of the reasons for this have been mentioned before—smaller units and also relatively high investment costs. As far as this latter item is concerned, I should like to refer to the last part of the diagram which has been submitted and which shows the increase of investment costs of chemical production in India. The column on the left-hand side shows the actual expenses in India of a complex chemical manufacturing unit divided into imported machinery, machinery from India and customs and clearing charges. Within the one year period between 1964 and 1965 the total investment cost for a certain plant which is being constructed at present has risen by almost 50 per cent as the last column on the right-hand side will illustrate. You will note from the middle column that the factors which are responsible for this increase are almost exclusively indigenous factors, that is to say machinery produced in India, expenditure for building and increase in custom and clearing charges for imported machinery. At this time, it should also be mentioned that the cost of chemical equipment is on an average three times as high in India as in Germany. The items mentioned in the diagram can be supplemented by numerous examples. The production costs of certain dye-stuff compositions used for printing textiles

now being produced in India as well as in Germany are 2 to 4 times higher. The same is true for intermediates used in making these dyestuffs. The world market in chemicals has for years shown a consistent tendency of declining prices due to strong competition. This tendency necessitates more and more rationalised production and to produce in ever larger units. In developing the chemical industry in India, this long-term trend must be taken into consideration and I am sure your government is well aware of these factors. India has, for instance, decided to get outside help for the construction of huge and modern ammonia plants which can operate at a low cost and provide this important chemical at world market prices. We feel the considerable price difference in chemical commodities between India and the world market will become less and less the more basic an intermediate chemicals are being produced in India in modern and sufficiently large quantities and in a well-balanced structure. Then the question of backward integration will become a logical necessity and the manufacturer in India will have an incentive to supply his production from indigenous intermediates instead of imported chemicals. Finally, he will arrive at a more or less complete synthesis of complicated compounds at lower expense.

Mr. Chairman, hon. Members of the Committee, I have confined myself, in my presentation, to technological and economical aspects in chemical production. The material presented to you highlights the cost structure of certain representative productions in India and in Germany which are being carried out. It has also shown to you, in this connection, the complexity involved in chemical reactions. These factors are of an economic nature and are economic realities which lie outside any patent legislation.

One of the strongest motivations of the Bill under discussion was the price

level of certain chemical commodities. I hope to have shown some basic factors which are almost exclusively responsible for the price level of a chemical commodity. These factors can be influenced only by measures in the economical and technical field. Accordingly, any remedy lies in influencing or changing these factors, but no patent legislation will have any influence on this. As a matter of fact, we feel that the proposed legislation will not only be no remedy whatsoever for the price problem but will rather endanger the future development of indigenous chemical industry by frustrating Indian research and development as well as the inflow of technology. Therefore, we would like to conclude our evidence by saying a few words on the attention paid to research by the German chemical industry.

Mr. Albrechtskirchinger: Mr. Chairman, hon. Members of the Committee, as Dr. Heubaum has pointed out on his concluding remarks—and, in my personal opinion, this material has been very carefully prepared by us based on actual figures of production costs of identical products which are made in Germany and India,—it is convincing to show where the cost factors are. We have shown with some purpose—it may be also accidental—certain productions where patent production does not really come into the picture. If you look at these statistics, which are true indications of what the situation really is like, and if you would imagine that any royalty may be added, you might hardly see it on the diagram because it would be a very very small item. In other words, as Dr. Heubaum has pointed out in his concluding remarks, in our sincere opinion and our own experience, any attempt to influence the price question of chemical products or any other commodity by making changes in the patent law, especially by making it in such a way to show differential treatment as to certain sectors of the industry, will have no result whatsoever along these lines. On the contrary, it will lead to other results on a different

level, which we would consider very grave.

May I briefly say, when you are having no research you will have no progress. In your country as well as ours, the future depends on one's own efforts. Our personal experience has shown that the patent system is necessary for a number of reasons, to provide a climate for research and development. There is, of course, the question, as is always said, of the temporary monopoly on the product because the patentee has to risk the additional investment that has been made. I think it is very much more because, as pointed out in parts of our evidence, this patent protection is such a security that it confers and encourages technological cooperation with the rest of the world, which, after all, is of the highest importance. Further more, it is a very powerful incentive to work on a scientific level, on a laboratory level and, not only work, but to readily disclose whatever we have.

May I, Mr. Chairman, refer you to the last diagram which we have prepared, and may I point out to you the result of an enquiry which has been made by our association on the expenditure of the chemical industry for research and development during 1964-65? This table includes some other items which might be of interest to you. Item(2) gives the total number of employees in the chemical industry. If you look at the next number you will see the percentage of persons among these employees who are engaged in research and development with university training. There are of course, a great number of people engaged in research and development who have no university training and who do equally very very useful work in the laboratories especially when it is not a question of basic research but applied research to problems of production on a commercial scale where a great amount of additional research has to be done. But you have here the

number, which is very indicative, of people with university training who are engaged in chemical industry and work in research and development.

Mr. Albrechtskirchinger: Further expenditure and we have also a statement of donation. Now these donations are also of some sort of importance, because the chemical industry in Germany tries to help social institutions, many scientific institutions to carry on the work or to do better work. There are also grants which are given for scientific purposes. May I, Mr. Chairman, conclude by giving you some information on a special institution that has been created within our Association in these past 15 years? It will throw some light on this matter. We look into the laboratory work being done today. We look into the future whether we will have enough chemists and scientists in 10 years or 20 years. So we go to schools. We give them books. We supply teaching material. We give scholarships to promising chemistry students. If I may tell you, Mr. Chairman, it is financed in the following way. In order to ensure that this will be handled in a fair and impartial manner, a fund has been created and every member of our Association, that is, the chemical industry of Germany, is now under an obligation to pay into this fund. At the rate of DM 1.25 per employee per month. It is based on this idea: the more employees there are, the more must be paid into this Fund. And then, of course, there is an administration which looks over the working of this Fund. In the year 1965, this fund has distributed 8 million Marks. This is a unique feature in Germany. We are the only industry where this functions on a completely voluntary basis. It has done enough research all over the world but it looks ahead to the future. A number of measures have been taken by giving money to University laboratories. We finance scientific publications which would never be bought for the price they would have in the market. We have subsidised this price. We send people to other

countries to study. So, all this is being done for the training of people. This is more or less a sidelight; it is not really the story of research and development in Germany. I have given you the figures. I had wanted to tell you about the idea of this special fund, the importance that we pay to this problem and we would ask you to consider specially this. The chemical industry is one of the basic and the most progressive industries in the world. This industry depends on effective research. I may give you one little figure. If you look at one of the largest companies of chemical production in Germany that produces everything—from the drug to the synthetic fibre—, you will find that 50% of the products they sell today were not in the market ten years ago. This is the basic figure, which is applicable. In other words, it is a fast developing and dynamic industry. The measures which you propose to adopt will, in our opinion, lead to opposite results. I think you will do no good to your country. So please accept this as our opinion. We have not come here for selfish purposes. In your country, as you know, we have participations. We operate everywhere in the world. The operations in your country are not easy for us. On the contrary, it is sometimes very difficult under the given conditions. I do not want to overplay this. I also wish you to realise that the German chemical industry at the moment suffers from a lack of manpower and we do not really know how to cope with this problem. We want to do this and that. But we have not come here as representatives under selfish motives. I hope you will take the impression that we wanted to share our experience with you. In our sincere opinion by passing this Bill you may discourage also foreign companies. However, for the development of an organized chemical industry it is a necessity for your country to become sort of development, the present Bill would be no basis.

Thank you very much, Mr. Chairman, and Members of the Committee.

Shri K. V. Venkatachalam: In the last statement that you gave, the turnover has been shown as so many milliards. What exactly does this mean?

Mr. Albrechtskirchinger: The term 'milliards DM' is used as defined, in the Oxford Dictionary. It would be 100 crores. The first item is in milliards Marks; the others are in million DMs. I am sorry it is not quite clear.

Shri K. V. Venkatachalam: I was comparing the figure given against turnover with the figure given against 'research' against item 4. What percentage does it work out to? 3 per cent?

Mr. Albrechtskirchinger: No, it is more. Because we do not have any official statistics which could give a complete picture, our Association made a representative enquiry which is as complete as possible during the last two years and we have come to a figure which is somewhat more than 3 per cent. In reality, there is a great deal of variation. For example when I make an analysis of the annual reports of two of our largest chemical concerns which operate in every field of chemical production I find that their research expenditure is roughly 5 per cent of the turnover. Sometimes it is very difficult to arrive at the items of expenditure which constitute research and development. I have given the break up specifically in order to show that we do not at all want to exaggerate. Here I want to explain quite clearly that in certain spheres of chemical production the research expenditure is much higher than in other fields, and this is so in the case of the pharmaceutical industry in Germany, where it is double. In the case of a firm like Bayer if you take the break up of expenditure for different departments you will notice that the expenditure on research and development is quite

high. In the pharmaceutical industry it is at least double, and sometimes three times the expenditure on research in other branches. In the chemical industry as a whole it may vary from 4 to 5 per cent.

Shri K. V. Venkatachalam: Could you give any figures about research expenditure by German firms in India?

Dr. Ulrich Heubaum: No. I am sorry, I do not have those figures.

Dr. C. B. Singh: An impression is growing that the difference in nomenclature between process and product is more artificial than real. You have mentioned that the process is so modified now that to bring about a difference between a product produced by a particular process and another process has become increasingly difficult. Will it be a correct conclusion?

Mr. G. Albrechtskirchinger: I think the question revolves round the issue whether we should have pure product protection or pure process protection. It seems to me that the intention is to avoid the sort of thing which we were faced with in Germany in the early days. What is the right thing to do? Modern chemical science is concerned with the discovery of new active substances rather than anything else. In the beginning the role of chemical science was quite different. Therefore, it was thought that new processes have to be thought of in order to arrive at new results, that one should make sure that by granting process protection discoveries of new processes should not be blocked. But now there is practically no new process. Chemical science has become so systematic and complete that, to the best of my knowledge, new processes do not occur. In Germany our jurisprudence has developed what we call protection by analogous process which contrary to the wording of the law—and this is the product of the think-

ing of judges—has given protection to the process, although the process is known to any chemist. In all the advanced countries if we have process protection, it is product by process protection. We should also go along those lines. There is another additional argument which is of importance. The patentee of a chemical patent in a country where we have process protection is obliged to cover all the imaginable processes that he could think of. In other words, it is not only duplication but multiplication of effort.

Dr. C. B. Singh: I wanted a simple answer to a straight sulphanilamide question. You know that sulphanilamide is a simple product. From that you can have 20 more products by molecular substitution. They are all given different names and in some countries they are patented as different products. The same thing can be said of many other products. By a simple process of substituting one molecule or the other and altering their position in the chain you are able to produce so many products. But the process remains essentially the same. A clever barrister like you can probably prove before a court that it is the same product manufactured by the same process. In view of that, is this distinction between process and product more artificial than real? Is it a fact that chemistry has advanced so much that the distinction between product and process has become unreal? In our Bill we are protecting the process. Will you feel satisfied if we include in it the product also?

Mr. G. Albrechtskirchinger: From our experience of evolution of chemical industry in Germany we would recommend product protection for chemical inventions. Should you, however, think that process protection is the right thing you should have product by process protection.

Dr. C. B. Singh: You have mention-

ed that the prices of everything in India are higher. Does this increased cost include the know-how paid by Indians to (i) foreign experts; or (ii) the cost of raw products imported from foreign countries; or (iii) the cost of machinery and spare parts imported from abroad? Are any of them responsible for the prices in India going up?

Dr. Ulrich Heubaum: I may elaborate on this and give some supplementary remarks to the figures which I have given. Firstly, no know-how fees are included in these figures. However, some provision has been made for the influence of customs and clearing charges in the case of intermediates. The cost of imported machinery also includes customs charges.

Dr. C. B. Singh: Coming to research, which is important, is the research of German industry done in universities, or is it organised by the industries themselves? Where do you spend the money on research? Is it on universities or factories or your own laboratories?

Mr. G. Albrechtskirchinger: I can answer this question in general terms only because I do not have any exact statistical material on it. In Germany we have a free and liberal economy and it is up to the individual entrepreneur to do what he wants. But since we are in a very competitive world where the mere survival depends on efficiency and progress, in Germany the companies have been spending a large amount on research and development in their own company. So far as the chemical industry is concerned. I think one could blindly say that a greater part of the new research in modern chemicals, drugs and insecticides is carried out by the industry itself. Any great industry in Germany must have its own centralised research institutions. However, we co-operate very closely with purely scientific institutions.

Quite often the industry finances certain projects in certain institutions and laboratories of the universities. They request the universities to work on certain problems in their laboratories and finance such projects. But, as far as the expenditure in the university is concerned, it is considerably less. It must also be said that the aim of their research is also somewhat different.

Dr. C. B. Singh: Is there any method of coordination between these agencies so that there should be no duplication?

Mr. G. Albrechtskirchinger: The research being carried out in the chemical industry and in chemical research institutions can very well easily be coordinated and there is no difficulty. Most of the research work done by Universities is known to every one in the field—so this sort of co-ordination, to the best of my knowledge, is very smooth and does not present any great problems. However, it is evident that research carried out in the industry laboratories is, of course, done behind the scene until patent application is filed.

Shri Arjan Arora: From this diagram of yours, Patent applications in Germany during 1905—1965 national and foreign applicants, it appears that Common Market has led to an increase in application.

Mr. G. Albrechtskirchinger: Sir, this is correct. I think this increase, it would be worthwhile if I give you some of the exact figures over the last year, there has been a very steady increase and I am personally convinced and it is confirmed by all experts that the beginning of the increase was accompanied by a great deal of inflow of, I must now say, extra European influence of technology.

Shri Arjan Arora: Would you give us the record of the foreign applica-

tions according to their origin from the British or the Common Market?

Mr. G. Albrechtskirchinger: I can do this easily.

Mr. Chairman: You can send it to us.

Mr. G. Albrechtskirchinger: I can send you the complete statistics.

Mr. Chairman: Have you got one common patent office?

Mr. G. Albrechtskirchinger: This is a project under consideration. We have a Draft Model Law of a European Patent which is drafted for these countries.

Shri Arjan Arora: You said you have Draft European Patent Law of the Common Market Area which talks of 20 years. Is 20 years period of patent the rule of any country today?

Mr. G. Albrechtskirchinger: The period is usually, the average might be, around 18 years.

Shri Arjan Arora: Am I correct to say that 20 years period is nowhere the law today?

Mr. G. Albrechtskirchinger: I would say the tendency goes for 20 years.

Mr. Chairman: He wants to know if 20 years period prevalent in any country today?

Mr. G. Albrechtskirchinger: I will have to look into this. In my own country it is 18 years.

Mr. Chairman: You may include this also in the note which you will send.

Mr. G. Albrechtskirchinger: I would be glad to do that.

Shri Arjan Arora: May I know, from referring to this statement, about royalty paid and received, who are the countries to which you pay the royalties? Are these countries member of the European Common Market or the North Atlantic Treaty Organisation which you have on your soil?

Mr. G. Albrechtskirchinger: I would say, generally speaking, the main line is the following: We pay the most to those countries where the technology is comparatively more advanced. In the chemical field, for example, we pay a considerable amount to Switzerland where our balance is more negative as compared to other countries. Overall, I would say these are industry figures as such, i.e. they relate not only to the chemical industry but to the industry as a whole.

Mr. Chairman: Have you got country-wise break-up?

Mr. G. Albrechtskirchinger: I have got country-wise break-up. I feel, Mr. Chairman, it is much more explanatory if complete statistics are submitted.

Mr. Chairman: Please furnish the same.

Mr. G. Albrechtskirchinger: I will furnish the same.

Shri Arjan Arora: You have given two statements: one relates to the period 1905—1965; the other to the period 1950—1965. The figures on royalties paid relate to the period 1950—1965. Could you give us the

other statement from 1905 onwards also?

Mr. G. Albrechtskirchinger: I will try to find and furnish this to you.

Shri Arjan Arora: If you find it will help us to compare.

Mr. G. Albrechtskirchinger: I will try to do it.

Shri A. T. Sarma: Do you consider that this Bill has been drafted to improve the existing Patent Law in India?

Mr. G. Albrechtskirchinger: I would say, Sir, I do not question the motives. This is quite clear the attempt is made to improve the legislation. I would say it is necessary to adapt the legislation to changes in technology. However, we do not believe that the measures taken, which are proposed in your Bill, will serve these cards. On the contrary we believe that since one of the main motivations is to get at the problem of prices the measures are completely inadequate. The results may be contrary and you have to think on different lines. It would be more farsighted to give a very sound protection to your own creative thoughts in your country. Overall, I may say, I would not at all regard it as an improvement. I am sorry to say, I would not regard it as an improvement.

Shri A. T. Sarma: My point is, whether it is an improvement or not.

Mr. G. Albrechtskirchinger: No. I may say....

Shri A. T. Sarma: You may differ on certain points....

Mr. G. Albrechtskirchinger: I said very clearly that this Bill, as it is drafted now, in my opinion, would

be no improvement on your existing patent law.

Shri A. T. Sarma: So, you reject this Bill totally?

Mr. G. Albrechtskirchinger: No, Sir. I did not say that. I started my statement with the following words that any patent legislation anywhere in the world needs, from time to time, an adaptation to changing technology, to changing world factors and so on and so forth. We also change our patent law from time to time. This is quite normal.

Shri A. T. Sarma: In your concluding remarks, you said that in passing this Bill, the Indian Parliament will take a step backward.

Mr. G. Albrechtskirchinger: Yes. This is precisely what I said and I repeat it.

Shri A. T. Sarma: Again, what you say is self-contradictory. Is it an improvement on the present law or not?

Mr. G. Albrechtskirchinger: I think I made my answer quite clear.

Mr. Chairman: It is all right.

Shri Dalpat Singh: You said that there are so many applications from abroad for the patents that the Patent Office cannot cope with the work and that there is the need for simplifying the procedure. May I know what are the main points for your law of patents to be simplified according to your opinion?

Mr. G. Albrechtskirchinger: I can very briefly outline them. The amendment of this law is under consideration by our Parliament. It does not touch the substantive patent law but only the procedure. What we want to bring in is a so-called deferred examination. In other words, you would first grant the pro-

tection for a limited number of years and there will be examination only on a special application filed either by the patentee or by a third party. By doing this, one would arrive at the fact that a great many of the applications filed will be, after five or seven years, dropped automatically. This is true because it is quite known that the inventor, for a number of reasons, as soon as he invents something, files the application. It is only later that he can find whether it can be worked or it is worthwhile or useful. If it is not found useful, he will drop it. So, if you start the examination later, you can eliminate a great deal of labour in your examination procedure. This is an important issue. We will have to do it in Germany because we have a back-log of more than a quarter million applications which have not been handled yet.

Shri Dalpat Singh: What is the usual time taken in granting the patent, that is, between the date on which the application is made and the date on which the patent is granted?

Mr. G. Albrechtskirchinger: Now, in Germany, the average time taken is between five to six years. The German Patent Office is completely overloaded and we have to resort to deferred examination.

Shri Bade: In your statement you have said that the total number of foreign patent applications in 1965 is 42.65 per cent. May I know, out of this number, how many applications are for pharmaceutical industry and how many are for other industries?

Mr. G. Albrechtskirchinger: This is impossible to arrive at because our classification as such is not separate. I am sorry I cannot answer this. The only thing I can tell you is the percentage of the turnover of the pharmaceutical industry in Germany is 10 per cent of the total chemical industry.

Shri Bade: On p. 5 of your Memorandum, it is stated:

"Non-working of patented inventions in India will often be due to factors completely outside the patent field and the grant of compulsory licences will be no remedy in such cases."

What are those factors according to you?

Mr. G. Albrechtskirchinger: First of all, the non-working of a patent as such, in our opinion, is not yet a criminal act because, as I have pointed out before, it must be a patent which is worthwhile and which can be useful. In other words, the mere statistical number will not give a clear indication. In India, you can find how many patents are granted and how many are worked but that is not a clear indication of the state of affairs because you would have to differentiate which of the patents are really held for the entire period and which can be used for commercial processes. Then, there may be a patent which may not be worked and its non-working may be detrimental to the country. Here comes the compulsory licensing regulation. If its non-working is detrimental to the country, I think, this should be the guide-line for any compulsory licensing regulation.

Mr. Chairman: That is what is provided in the Bill.

Shri Bade: Yes; that is the purpose of the Bill.

Mr. Chairman: You may not find it profitable to start its manufacture here. But if an Indian national or somebody else says that he wants to have a licence to manufacture it, why should it be denied to him.

Mr. G. Albrechtskirchinger: I realise this. Our objections are only to some specific parts of it, not against the general provision of compulsory licensing as such.

Mr. Chairman: If it is in public interest, it could be done.

Mr. G. Albrechtskirchinger: These things have to be carefully thought over. If it is only the non-working, that is not enough. It must be more than that. It has to be seen whether it could be done. There are other reasons outside the patent field which restrict this. Again, it is to be seen whether its non-working is detrimental to the public interest.

Mr. Chairman: It is only under such circumstances that licences are granted.

Shri Bade: You have attacked the biggest portion of Clause 87, i.e., chemical substances. You have stated that substances aid if there is compulsory licensing in regard to chemical substances, then there will be no invention in India. But you have not stated anything about drugs, i.e., 87 (a) (i) and (ii). But about (iii), which is the biggest portion of this Clause, you have said that the method of process or production of chemical substances should not be compulsory and that there should not be automatic licensing.

Mr. G. Albrechtskirchinger: I am very glad you have brought out this point. I have singled out this Clause in order to show that this 'automatic licensing', as I chose to call it, applies to all the chemical industries, and I think that it will not be a good thing for your country. It is needless to say that it is not advisable to apply it also for any other sector of the chemical industry, for example, drugs and so on. I think the normal procedure of compulsory licensing should suffice.

Shri Bade: In India, 90 per cent of the patents are given for food and drugs. If they are patented, then they have the monopoly for exploiting the poor people in India; if they are not patented, any manufacturer from Italy or Japan or any other country can come and compete with the patented medicines.

Mr. G. Albrechtskirchinger: To this question, of course, a great many

things can be said and should be said. The fact is that we consider things differently. As I have tried to point out before, the fact that 90 per cent are foreign applicants in India is a mere indication of the fact that the industrial development of this country has not yet sufficiently advanced to provide another ratio. As soon as more industrial developments takes place here, you will have more applications from your own nationals and the ratio will be different. But, in our personal opinion, this is not something to be afraid of.

As far as monopoly is concerned, I want to say the following. We have tried to point out to you under what conditions chemical productions are made in this country. You see the difference in prices. We are certainly not responsible for the prices. These are economic matters, in which patent law plays no role whatsoever. You might say that we have the example of drugs costing so much here. For this we have already supplied you the reasons. If you want to produce a complicated drug in a commercial scale, the pre-requisite for it is a well-balanced structure of chemical industry where intermediates and everything else that you need are available at reasonable prices. Patent monopoly, as a price factor, according to our experience is completely negligible in this country; it does not amount to anything. The only way in which you can lower the prices of these very important commodities in India is to develop your own industry to the utmost, to co-operate with the so-called foreign collaborators that are coming and to provide all the basic organic chemicals and intermediates which are necessary for complicated final products. This is, if I may say so, our advice on this issue.

Shri B. K. Das: In your Memorandum you have discussed about the use of inventions for purposes of government. On page 7 you have said that the use of invention for the purposes of Government must be

strictly limited to use by government only. Do you mean both Central and State Governments?

Mr. G. Albrechtskirchinger: As far as this terminology is concerned, it was not thought to make a difference between State and Central Governments. The idea was that this sort of measure should be restricted to government authorities.

Shri B. K. Das: Should it also be in cases of national emergency; for example, widespread epidemic or something like that?

Mr. Chairman: The Central Government will decide. In national emergencies, the States have no power. It is for us to decide. Why should we ask him about that?

Shri B. K. Das: I wanted to have a clarification from him as to what is his idea about national emergency.

Mr. G. Albrechtskirchinger: I can give a general answer to that, but not a specific answer. We consider those measures, that is to say, uses by the Government for purposes of government, as very extra-ordinary measures which should be used only when there are over-riding necessities. For example, in my opinion, an epidemic disease, a revolution, war, famine or things of that sort would be the principle. Of course the question must be decided whether the use of patents in that particular case would remedy the situation. I may point out that we do have a similar clause in our German patent law which, if translated in English, means "public welfare". There must be reasons of public welfare and in that case, the Federal Government of Germany, that is to say, the entire Government and not an individual cabinet member, may issue an order that an invention, a patent, may be used for government purposes.

Mr. Chairman: Yes; you have that provision; it is possible by an order of the Government in the interest of public welfare....

Mr. G. Albrechtskirchinger: It is not a free use. First of all, the decision can be contested, secondly, there is remuneration provided in the law.

Shrimati Sharda Mukerjee: In one of the statements you have given to us, you have given Germany's balance of royalty payments over so many years.

I would like to know what amount of this was recovered in export trade. You have given us a statement showing the royalties paid and received in the Federal Republic of Germany for inventions, processes, copyrights etc. Could you give us as to what amount of this is realised from export trade? You say that the position has improved considerably and you do not have to give out any money and you are benefiting to the extent it is minus. Can you tell us what would be the export trade on this, on these commodities you manufacture under patent protection with foreign collaboration?

Mr. G. Albrechtskirchinger: I am sorry I will not be able to give this information readily as I do not have any additional statistics with me. Secondly, this table shows the balance of payments position for the entire German industry and your specific question, I think, refers to chemical products.

Shrimati Sharda Mukerjee: Actually what we find in India is that there is hardly any export from industries where they have patents with foreign collaboration. Export market is more or less shut out for us.

Mr. G. Albrechtskirchinger: I think they pay royalty to the foreign concerns.

Shrimati Sharda Mukerjee: But a great deal of it is recovered as they attract export markets whereas the things that are manufactured in our country are actually for domestic markets.

Mr. Chairman: You pay royalty for things manufactured in your own

country under foreign patents and you export them. What is the export earnings of your country on that account?

Mr. G. Albrechtskirchinger: I have no information with me now. I am very sorry indeed. In order to answer your question we have to have exact statistics. At best I could only make a guess.

Shrimati Sharda Mukerjee: As has been brought out by Justice Ayyangar in his report on the revision of the Patents Law, while the working of Patent law in European countries may be effective and successful, it is a different matter with us because here it is fairly a domestic market and we have to safeguard the interests of this country. This Bill has not been modified in haste. We have an elaborate report on the Patents Law by an eminent Judge who has gone into it in detail and it is because the patents were not worked for the benefit of India that we have been forced to have this modification. Just for instance, one of the main reasons why this compulsory licensing had to be introduced is, as Justice Ayyangar has brought out, that the patents which were granted were not worked in India. Your first point was that compulsory licensing would be a regressive step.

Mr. G. Albrechtskirchinger: I should like to say the following regarding this. I do not mean in any way questioning the soundness of a compulsory licence. If you misunderstood me, I would like to clarify, I also believe and I would also like to repeat it that in a country like India where you have obviously an interest that inventions which are protected here are being worked and if you decide to have provisions in your Patents Law that guarantee the working of patents, I think, this is in principle something which is quite acceptable. The only thing that I mentioned is that there are many factors for the non-working of patents which are completely outside the patents sphere. In other words what I tried to say was that every case has to be decided on its

individual merits and has to be carefully decided. This is what I wanted to convey. The licence of right regulation is, in my opinion, in a completely different sphere, because there you should have a procedure which considers every case upon application and so on and so forth. But you subject the entire chemical industry to a sort of automatic compulsory licensing and this will have completely different effects. In other words, this would mean this: that for any chemical invention—not only pharmaceutical—patent protection in India would practically no longer exist because any one who would have a patent here would immediately have to share it without any restrictions with any one who comes and wants to work it. It would be completely automatic. This is one of our main points here that we would strongly underline. It should be only in cases of misuse but by subjecting the entire chemical industry to this sort of treatment, you will not arrive, in our sincere opinion, at results which the framers of the Bill might have in mind.

Shrimati Sharda Mukerjee: I am afraid it does not convince me. Unfortunately we have to modify this.

Mr. Chairman: That is another matter.

Shrimati Sharda Mukerjee: If we have perfect market conditions like competition, then it would be a better thing to pay 4 per cent royalty on the licence of right. That may be all right for countries which are industrially developed but for a backward and undeveloped country, I think, the protection needed is higher.

Mr. Chairman: That we will discuss later.

Mr. G. Albrechtskirchinger: Internally even a country like India is very much in need of competition because it is a constant check on one's own efficiency.

Shri Shyamnandan Mishra: One point which has very much exercised the minds of Members is about the price and the cost of production. The learned witness has told us that much of the increase in cost of production is the national contribution; that is, it is India which has to account for much of the increase in the cost of production of certain of the materials, in construction and the price of indigenous machinery, etc. Would he be kind enough to tell us as to what extent the contribution is national. He has given us certain figures. Can he tell us, in terms of percentage, the increase in cost of production due to national factors and to what extent it is due to external factors?

Dr. Ulrich Heubaum: In the graph we have supplied you, there is a breakdown. Here one can see that in these cases of investment-costs the percentage of imported materials is about 20 per cent. This means that they have to pay 20 per cent on imported machinery customs and clearing charges. On this 20 per cent, they have to pay in this specific case about 5 per cent; that means 25 per cent clearing charges and customs.

Shri Shyamnandan Mishra: You have given us certain figures with regard to the expenditure incurred on research and development in the Federal Republic of Germany. How much of this expenditure is contributed by the patentee manufacturers and how much by non-patentee manufacturers?

Mr. G. Albrechtskirchinger: The figures which we have given in this table are the research expenditures of the chemical industry. The core of your question is who actually pays it. I can quite clearly tell you that they are the ones who are in research and the ones who have patents. And may I tell you one thing? Any company to-day in Germany of any importance which brings out products to the market which are really new, which are important, which mankind is in need of, does research. This is basically the question. They are the research-minded men, they are the progressive

ones. In Chemistry nowadays, without research there is not very much that you can do, except may be some very simple products where there is no technological advance possible and which is really not chemistry but just mixing two or three things together.

Shri Shyammandan Mishra: My point is, what is the amount these patentee manufacturers spend inside Germany on research and development. They may be carrying on research and development outside Germany if they happen to be foreign patentees. They may not be spending all that amount in Germany.

Mr. G. Albrechtskirchinger: The figures that I have here, to the best of my knowledge, refer to expenditures in Germany. Of course, this is also a centre of research activity. We have certain co-operation also in research which is carried outside of the borders. But to the best of my knowledge, most of the research is in Germany.

Shri Shyammandan Mishra: Regarding product and process, I would like to know to what extent in Germany you have got process patents. Or, are all of them product patents, because you seem to be telling us something which is not very much in keeping with the proposed Bill of ours?

Mr. G. Albrechtskirchinger: The German Patent law from the very beginning provided, generally speaking, product protection with the following exceptions: "inventions relating to foodstuffs, luxury products"—here the English translation, 'luxury goods' is not correct, for it actually refers to coffee, tea, cigarette and things of that sort—"and medicines as well as to substances produced by chemical processes in so far as they do not relate to a particular process for the production of these articles." So, in other words, food and chemical inventions, ever since the beginning of the German patent law, have had only process protection. In the modified form, the protection is extended

to the product which is the result of this process.

Shri Shyammandan Mishra: What is the proportion of the process patents in your country?

Mr. G. Albrechtskirchinger: Globally I can tell you that the German chemical industry gets roughly 15 per cent of all the patent applications filed and takes the second place right after the electrical industry and I would have to look up the statistics for food and medicine; if it can be done, I will be able to supply the information.

Mr. Chairman: I am reading from a quotation of German law. "Inventions, the utilisation of which would be contrary to law or public morals, inventions of articles of food, and taste, medicines and substances which are produced by chemical processes, in so far as the inventions do not concern a specific process for the preparation thereof, are not patentable. Processes for preparing articles of food drugs and medicines, are, however, patentable." Is this correct?

Mr. G. Albrechtskirchinger: The wording may be different, but in substance it is correct.

Sardar Daljit Singh: Is there any control of the price of the patent drugs in Germany and if so, what measures are being adopted to check high prices?

Mr. G. Albrechtskirchinger: We don't have any price control of patented articles; this has never existed anywhere in Europe, to the best of my knowledge. Price control has applied to a certain group of commodities whether they be patented or not patented. In other words, price control which has its legal backing in some special statute has, of course, been in existence in a number of countries. To the very best of my knowledge, in pharmaceuticals, this does not exist in Germany. In the chemical field, there have been in the past certain regulations on prices for fertilizers and some other industrial products.

One thing I want to make clear, the German legislator has never adopted the way of saying because a product is patented, there should be price control. He only took from time to time certain commodities as a group. Does that answer your question?

Shri Kashi Ram Gupta: In view of the fast progress of technology in chemical industries, the expert opinion is that a patent these days goes out of use within a period of 10 years. Are you of this opinion, or if you have a separate opinion, please let me know?

Mr. G. Albrechtskirchinger: No. I am not of this opinion that due to the fast technological change, the life span of a patent in the chemical field or in general should be shortened. On the contrary, one of the main reasons for having a strong patent protection is to provide the very basis that we do advance technologically and that we do go ahead very fast by virtue of a patent system which is strong and which also provides adequate returns. You must always allow to the patentee a certain period in which he can try to perfect his methods, to go beyond the laboratory stage and use the product commercially and also prepare the market in order to have a certain return on the investments he has made for his research. These two issues are separate.

Shri Kashi Ram Gupta: You have talked very high about the Model Law. The Model Law on its page 49, gives a commentary that if a patent is given for 10 years after grant of the patent, it can also suffice. What is your opinion about this? It is on page 49, minimum period of 10 years can be there after the date of grant of the patent.

Mr. G. Albrechtskirchinger: Is that adequate time—is that the question?

Mr. Chairman: That is what the Model Patents Law says on page 49.

Mr. G. Albrechtskirchinger: Unfortunately I do not find it. My paging here is different. Anyway, as far as

I understand the question, there is need for a period of 20 years roughly after filing.

Shri Kashi Ram Gupta: It is 10 years in the Model Law.

Mr. G. Albrechtskirchinger: This depends of course on the lapse of time which was needed. . .

Mr. Chairman: That is why they have fixed the date after the grant of the patent.

Mr. G. Albrechtskirchinger: Well if you fix the date after the grant of the patent, this has to be studied closely. I think in most cases it will arrive at a very satisfactory solution. It would have to be studied closely.

Mr. Chairman: It is quite satisfactory.

Mr. G. Albrechtskirchinger: I would tend to believe that this might be satisfactory after the grant.

Mr. Chairman: Whatever may be the time taken in preliminary procedures, it is satisfactory.

Mr. G. Albrechtskirchinger: The difficulty is following. I think you have to look at the situation in individual countries. For example I do not know—and I cannot judge—what the special conditions are in India to arrive, for example, at the additional steps which are necessary on clinical tests and that sort of thing and the administration of drugs as such.

Mr. Chairman: What may be the time taken in preliminary procedures, if 10 years period is taken for a patent, would that be sufficient? That is the Model Law which has not yet been adopted by many countries.

Mr. G. Albrechtskirchinger: Well, it depends on the length of the procedure.

Shri Kashi Ram Gupta: You have just mentioned in your statement that

in Germany, the Patent Law is for a period of 18 years and about 5/6 years are taken for granting the patent. It means the period after the granting of patent remains only 12 years. So 12 years or 10 years, there is a difference of only two years.

Mr. G. Albrechtskirchinger: This, of course, is one thing. If I may explain in detail, after the filing of a patent, we have a public notification after a certain time and from the beginning of this notification you have provisional protection although the patent is not yet granted. In spite of my statement, it is quite correct that the present state of affairs in Germany which needs an excessively long examination procedure is detrimental to the patentee, is detrimental to the patent system. Whether you have a patent granted or not is not decided early enough. This is a so one of the reasons, apart from the fact that it would help our Patent Office, why we want to change the procedure.

Mr. Chairman: We are concerned with the present conditions, not with what happens in the future. It gives 12 years after the patent is granted. We have put 14 years. What is your objection? You cannot have any objection.

Mr. G. Albrechtskirchinger: There is one thing there, Sir. As far as pharmaceutical products are concerned, it is not 12 years. Our patent is 18 years from the time of filing the application.

Mr. Chairman: Even in this case, even for 10 years he gets all the rights. It dates back to the date of application.

Mr. G. Albrechtskirchinger: That is different. It makes a little difference. We have 18 years from the date of filing. In your present draft, it is proposed to shorten it to 14 years. This is an intermediate step.

Mr. Chairman: It takes 3/4 years. What can be your objection?

Shri Kashi Ram Gupta: Japan is said to have a very strong Patent Law at present. Are you agreeable to it? And if so, you should know that Japan has got 15 years period for a patent from the date of filing of the application.

Mr. G. Albrechtskirchinger: I am not familiar with the particulars of the Japanese patent system. There are good many variations in different countries. The period averages above 15 and between 15 and 20. International tendency is towards 20 years. I would prefer that the question about Japan be put to some one who is more able to answer it.

Shri Kashi Ram Gupta: Is the chemical industry and the pharmaceutical industry spread over the whole country or is it concentrated near Frankfurt and all these places?

Mr. G. Albrechtskirchinger: Sir, we have chemical and pharmaceutical industry, more than 2000, probably 2,500 different companies. Of course, among these, there are some which are quite large; they are the one which produce everything in chemicals from basic things to very refined products. They are located geographically mainly along the Rhine river, for technological reasons because they need a lot of water which is cheap for cooling purposes and production processes. They may be about 50. The climatic condition is roughly the same, as the country is small.

Shri Kashi Ram Gupta: It is not a tropical country, and air-conditioning etc., may not be needed there. Is that a reason for reduced cost of production?

Mr. Albrechtskirchinger: It is a small item; it is mostly a question of the size of the unit. Of course, tropical conditions can increase the cost of production.

Shri Kashi Ram Gupta: Is the pharmaceutical industry more profitable in Germany compared to other

industries, do they declare more dividends, and are their exports the highest?

Mr. G. Albrechtskirchinger: For that we will have to make an analysis of company reports in Germany.

Mr. Chairman: You gave us figures to show that you are paying more royalty to foreigners than the royalty coming to Germany, more than double. What is the percentage of royalty you are paying for the foreign patentees?

Mr. G. Albrechtskirchinger: It varies from 2 to 12 per cent, and depends on individual contracts. It depends on the merit of the product in question, and even pharmaceuticals cannot ask for a higher royalty because there are competitive materials, and only the difference between what is already available and whether the other product is superior counts. So, if there is an excellent new dye stuff, for instance, the royalty can be higher than for a pharmaceutical which does not have such comparable quality.

Mr. Chairman: In your patent law, you have got a provision for compulsory licensing and also licence of rights in the public interest?

Mr. G. Albrechtskirchinger: Yes, in section 15.

Mr. Chairman: Similarly you have a provision for revocation of patents?

Mr. G. Albrechtskirchinger: Yes, in section 8.

Mr. Chairman: You have got a provision for endorsement of patents, analogous to the provision for licence of rights in our Bill.

Mr. G. Albrechtskirchinger: Yes, but we do not call it licence of rights in the terminology of your Bill. A patentee can voluntarily grant a licence to anyone.

Mr. Chairman: Thank you very much. We have taken a lot of your time.

Mr. G. Albrechtskirchinger: Mr. Chairman, it is our duty to thank you

and the Members of the Committee for the patience and the interest that you have shown. Thank you very much.

(The witness then withdrew)

(The Committee then adjourned to meet again at 14.30 hours)

(The Committee reassembled at 14.30 hours)

II. Centre European Des Federations De L' Industrie Chimique Bureau, ZURICH.

Spokesmen:

1. Mr. R. A. Willens, Head of the Patent Department of Shell Chemicals, London.
2. Mr. J. Egli, Director of the Swiss Society of Chemical Industries.
3. Mr. Haslam, Head of the Patent Department Welcome Foundation Ltd. London.
4. Mr. D. H. Nowotny, Delegate of Swiss Society of Chemical Industries, Zurich.

(The witnesses were called in and they took their seats)

Mr. Chairman: Gentlemen, whatever evidence you give is printed in the Parliament and laid on the Table of the House. It might be distributed to Members. Even if you want any portion of it to be confidential, it will be printed and distributed to Members and laid on the Table of the Houses of Parliament. The Members have received your Memorandum. It has been distributed to all the Members. If you want to add anything to it, you may kindly do so.

Mr. J. Egli: Mr. Chairman, Gentlemen: On behalf of CEFIC, I like to express my sincere thanks to you, Sir, and to the whole Commission of the Indian Parliament for giving me this opportunity of participating at these hearings. I am extremely impressed by the manner in which you organise these

hearings and let me say that it is very rare in the world that a Parliamentary Commission is receiving foreigners to testify. For this very great generosity of your Commission, I would like to express my admiration and my sincerest thanks.

The subject of the Indian Patents system is so wide and complicated that for the benefit of the hon. Members I have taken the liberty of being accompanied by some very competent colleagues who will assist me in answering questions which the Commission would like to ask. May I just briefly introduce my colleagues? That is Mr. Willens on my right side, Head of the Patent Department of Shell Chemicals, London; Mr. Haslam, Head of the Patent Department of Wellcome Foundation in London; and Mr Nowotny on my left side, a delegate from our Society—the Swiss Society of Chemical Industries in Zurich.

Before I begin with some points, I would repeat once more that I can assure you that I do appreciate this gesture to have the opportunity to be here, as I consider that gesture of a great Democratic country as your country is.

In addition to what has been said in the CEFIC Memorandum of January 5, 1966, mention should be made of the following points.

The first point is: CEFIC means the Centre Europeen Des Federations De L'Industrie Chimique. That would mean in English, freely translated, European Centre of Federations of Chemical Industries. This Centre is composed of the National Associations of the chemical industry of the following countries: Austria, Belgium, Denmark, Finland, France, Germany, United Kingdom, Italy, the Netherlands, Norway, Sweden and Switzerland. It practically covers the entire chemical industry of Western Europe. The Chemical industry has numerous branches of manufacture and in what will follow I shall confine my remarks to

only the most important of these, viz. the manufacture of inorganic and organic chemicals. They form the starting materials for many other branches of the chemical industry engrossed in manufacture of specialised products. In the case of inorganic chemicals, basic materials utilized are minerals, such as sulphur, pyrites, salt, and so on; while in the case of organic chemicals, basic materials are coal, on the one hand, and crude oil, on the other. These natural products are converted by what we shall call the basic chemical industry into a variety of further products, which, in turn, constitute the starting materials, utilized by the specialized chemical industries for the production of e.g., dyestuffs, plastics, pharmaceuticals and many other classes of compounds.

From the above it is clear that the chemical industry represented by CEFIC is vitally important to the chemical industry as a whole. To use an analogy, were one to consider the entire chemical industry as a column, the portion we represent would constitute the base, the removal of which would cause the entire column to collapse; that means that the pharmaceutical industry and other highly specialised industries would be deprived of their sources. During the past 20 years, the chemical industry has progressed tremendously. In the 12 countries of CEFIC, the 1963 turnover was 24,400 million US dollars. This represents approximately 29 per cent of the entire world production of chemicals. By 1964, the turnover has jumped to 27,100 million dollars. As this 1964 figure still represented 29 per cent of the world production, the chemical industry made tremendous advances throughout the world and the effects hereof were also noticeable in India.

It is a well-known fact that the European chemical industry adheres to and defends a most liberal commercial and economic policy. That this is so, is borne out by the statistics of foreign commerce in the chemical sec-

tor. In 1964, for example, the 12 CEFIC countries exported chemicals to the value of 6,587 million United States dollars, while in the same period, the imports amounted to 4,938 million dollars. In 1963, the imports were 3,994 million dollars, and the exports were to the value of 5,583 million dollars.

Numerous factors are responsible for this extraordinary state of affairs; let us consider only the most important. In almost all the countries concerned, the Governments have granted the manufacturer appropriate protection for his inventions and except when serious problems arise with respect to location and the supply of raw materials, a rapid growth of the industry resulted. The protection of the inventions made by the manufacturer thus represents a most important factor in ensuring a favourable climate for unhindered growth of industry. This point of view is shared by leaders throughout the world, and the Secretary-General of the United Nations, Mr. U. Thant, commented as follows on this very point:—

“Firstly, patent protection has encouraged research and invention; secondly, it has induced the inventor to disclose his discoveries instead of keeping them as a trade secret; thirdly, it has offered a reward for developing inventions to the stage at which they are commercially practical, and fourthly, it has acted as an inducement to invest capital in new lines of production which might not appear to be profitable if many competing producers embarked on them simultaneously.”

In studying the economic situation of a country, it is necessary to investigate the import and export regulations, the customs duties levied on imports, possible import restrictions, the financial situation within the country, foreign debts and the attitude of the government towards foreign capital investment. A further most important aspect which is always considered is the extent to which the national

legislation provides protection for industrial property: when such protection is either absent or meagre, the climate for foreign investments of any kind is seriously impaired. When industrial property is not adequately protected, not only is the national inventor handicapped, but foreign inventors are given no assurance that their efforts and financial risks will be adequately rewarded. Under these circumstances, they will prefer to turn elsewhere to extend their activities with the result that industry in the country concerned will stagnate or even receive a serious setback.

It is to be expected that in the event of some of the provisions currently contained in the Indian Patents Bill becoming law, foreign investors would be discouraged from continuing to invest capital in India. The contribution of foreign industry towards the steady development of the Indian economic standards may be assured if the Government of India creates the right climate for the protection of such capital. The provisions contained in the present Bill not only do not create such a climate but tend to destroy it.

Turning to my point No. 3, it must be borne in mind that one of the prime objects of strong patent protection is to make possible the recouping of research expenditure. In this respect, the amount spent on chemical research (including pharmaceutical) is tremendously high in Europe. Its exact total figure is unknown. In Germany, this expenditure is approximately 300 million dollars per year, and in Switzerland, it reaches an yearly amount of about 170 million dollars. It would be an error to think that the progress could continue if research were to be curtailed and it is equally as obvious that the products of today must necessarily bear the research costs of tomorrow.

Due to the flexibility and open-mindedness of the chemical industry, this industry has not shirked from the task of building its factories outside Europe. Your own country is an elo-

quent proof hereof, as a number of European-based chemical enterprises have opened factories in India. The European chemical industries in addition strive for the removal of barriers to trade and progress, and the industry is of the firm opinion that the greater the exchange of goods and know-how, the greater will be the chances for the raising of the population standard of living. It is my conviction as well as that of my colleagues that it would have been impossible for the chemical industry in Europe to have attained the heights which it has done in so short a time had not industrial property been sufficiently protected. It is because of our firm belief herein that all steps undertaken with respect of patent matters in Europe are aimed towards the strengthening of the patent system. In this respect, you are undoubtedly aware of the European patent convention envisaged by the common market countries. In urging you to introduce strong patent protection in India, I merely suggest that you adopt that type of Bill under which so many countries of the world have prospered.

4. The main problem underlying the discussions on the Indian Patents Bill is whether India will really be better off by restricting the rights of patentees, in the chemical field by making patented inventions more freely available to the public and the Government as envisaged in clauses 48, 87, 88, 93(3), 95(3) and 99 to 102.

My Organisation believes that this liberalisation is not in the true interest of the Indian economy. While a transient advantage might be gained here and there on prices, in the main the weakening of patent rights will slow down the transfer of technology into India from the more developed countries and react unfavourably on the investment climate.

The role played by patents in the economic and industrial growth of a country is a long-term one. India is on the brink of a great industrial development and to weaken her patent system now will have effects which may

only become apparent some years hence, by which time the damage will have been done.

The question of the role played by patents has been carefully studied in the two reports "The Role of Patents in the Transfer of Technology to Developing Countries" and "The Model Law for Developing Countries on Inventions". I believe the Committee is already aware of these reports. They are the result of a deep international study of the whole problem, in which study India took part, and it is emphasised what value a strong patent system has in developing technology in a country.

For example, the Model Law, in Section 35 allows for the grant of compulsory licences in certain vital areas, at any time, without the waiting time provided in Section 34; food products or drugs are mentioned as areas where certain countries consider such provisions necessary; but the Report emphasises that:—

"This faculty should be used with measure and caution, because in all cases in which it is used it is likely to stifle invention, research and investment".

The document "The Role of Patents in the Transfer of Technology" analyses the effect of patents in the transfer of technology in the basic philosophy of the U.N. that the economic progress of the developing countries is a matter of concern not only to themselves but also to the world community at large, and that access to knowledge and experience in the field of applied science and technology is essential to accelerate the economic development of the developing countries and to enlarge the over-all productivity of their economies.

It is the experience of those countries which have had a well developed patent system that it has greatly stimulated the local introduction of foreign techniques to the country's overall economic advantage, though royalties

have had to be paid. My Organisation believes that it cannot be in the interests of India for patents in the chemical field to be so drastically weakened as is proposed in the present Bill.

5. Turning now to the actual text of the Bill, and in amplification of what has been briefly stated in the Memorandum, it may be observed firstly and in general that an important aspect of the advantages purporting to be conferred on the patentee is security which he ought to enjoy from the pirating by late-comers in the field of the development work that he will be persuaded to do in India.

As to the "rights" of the patentee these are the rights which the Bill legitimately purports to confer on an inventor and the mischief of the present Bill lies not only in the extensive limitations of those rights as compared with those considered appropriate in the experience of most countries of the world, but also the possibility that even these limited rights may be withdrawn at any time. The investor of capital and the importer of technical know-how in considering the protection afforded by any patent is obliged to take a pessimistic view that if his investment is successful the protection on which he is counting may prove to be a total illusion.

6. As to the detailed clauses of the Bill; regarded not from my own point of view but from that of a practitioner in patents, the following should be added to the substance of the Memorandum.

Clause 8

The duties laid upon an applicant under this clause are not only onerous in themselves but lay a very heavy burden on the Examining Staff of the Patent Office, to weigh up and assess the effects of the information that must be supplied under this clause. Indeed, we are far from wishing to be impertinent in saying, as a criticism of the Bill in general, that it will make much heavier demands upon the ex-

perience of the Examining Staff than is the case with any or most of the Patent Offices of the world, who are themselves currently finding difficulties in securing adequate staff.

Clause 53

It is a fact that, with the increasing complexity of industrial operations, the existing terms of patents in many countries are proving to be unduly short, and the world tendency is rather to lengthen them than to shorten them, as in this Section. For very many important inventions the early years and sometimes even the later ones after grant, are still unprofitably taken up with development work.

Clause 76 raises an apparently small point but one of some constitutional importance, that the secrecy of communications to the Patent Office can be breached, not only by the order of the court but also under the executive direction of the Central Government, or even of the Controller notwithstanding that he is himself, presumably, an officer of the Patent Office.

Clause 87(1) is the clause more than any other that will prove a disincentive to investment in that it withdraws any possibility of exclusivity from the investor who wishes to set up a plant for the manufacture of chemical substances. He may be all too sure that when he has gone to the expense of setting up a plant and overcoming the inevitable teething troubles, anyone may come and take advantage of his successful development work under a licence granted as of right.

Clause 88—On the subject of any arbitrary ceiling for royalties, it should be observed that a reduction of manufacturing costs is an undoubtedly laudable object of research and invention, and the effect of this provision is to reward an inferior invention more highly than a superior one which reduces the manufacturing cost to a greater extent.

In licence negotiations and other operations for the determination of

payments appropriate to reward a patentee while not unduly handicapping the licensee, the question of what form of product is to carry the royalty percentage is a very important and a very variable one. The provision of a fixed ceiling will unavoidably distort this question and prejudice the optimum conduct of the execution of the invention.

Clause 95(3)—It seems unjust that the licensee should be authorized to import a patented article while the patentee himself is debarred from doing so.

The final word of the Memorandum on the subject of the sale of licensed know-how is extremely cogent. Indeed the implications of the sale of know-how call even more loudly for re-assessment than plans for the investment of capital. The numerous and extensive provisions of the Bill for compulsory licensing and for the withdrawal of rights makes the retention of know-how the only defence in the hands of the would-be licensor. These provisions would encourage, where a licence is compulsory and unavoidable, the execution of a 'bare licence' unaccompanied by the detailed know-how necessary to take advantage of the licence. A licence can be compelled, but the transmission of know-how cannot.

It is in the light hereof that I should like to express on behalf of CEFIC the hope that the new Indian Patents Bill will be drafted in such a manner that it will ensure a sound basis for the harmonious development and expansion of the Indian industry.

Mr. Chairman, hon. Members of the Committee, may I once again thank you for the great honour you have given me to appear before you. My colleagues and myself deeply appreciate this very great gesture of a great democratic country.

Shri Bade: You object to clause 95(3). You object to this because the Government fixes the price. When the

Government finds that foreign patentees have exploited our country and they have the monopoly also, they fix the price. Why should there be any objection?

Mr. R. A. Willens: I think the particular objection to this clause is that it grants a right to a licensee of an invention which right is denied to the patentee himself, namely, that of importing the necessary product. This seems to us to be unfair. I think this particular point would be met if the patentee is also authorised to import the product along with or instead of the licensee.

Mr. Chairman: If a patentee does not supply the required quantity of medicine or drug at a reasonable price and charges extortionary prices and the Government in the public interest feels it necessary to import such articles and fixes the price, why should you object to that?

Mr. R. A. Willens: I understand from what you say that this clause is designed as a penalty to the patentee; but it is not expressed like that—it simply says that if the Central Government considers it necessary in the public interest.

Mr. Chairman: Government will interfere only when it is necessary in the public interest; not otherwise.

Mr. R. A. Willens: There is nothing in the clause to indicate that the patentee was in any way at fault and yet the licensee is authorised to import.

Mr. Chairman: Suppose the patentee misuses his patent or does not work in the interests of the country and the Government feels that it is in the interests of the country to get that particular medicine or drug. What is wrong in their authorising the licensee to import the required quantity of medicines at reasonable prices?

Mr. J. Egli: May I ask Mr. Nowotny, who is specialised in this line, to give an explanation which could satisfy the hon. Member who asked this question?

Mr. D. H. Nowotny: You have been mentioning something about reasonable prices and I think concerning the draft Bill it is the crucial question. What is the reasonable price? How do we determine what is a reasonable price? If I may re-state the question of the hon. Member, I believe what pre-occupies the hon. Member who asked this question is the following. Suppose a company has developed a drug, say in Switzerland. There is the well-known case of the active Substance of a tranquiliser being sold at Rs. 5,555 per kilo^g and another firm delivering the same substance at Rs. 312. If I understood correctly, the hon. Member wonders if there is not some exploitation going on in this field. In this special case, if the Government decides to fix the price of the substance at the low level of Rs. 312, we would not be able in Switzerland to cover our research cost and the return on the capital invested in this research. This is the only objection that we have and that is why we believe that patent protection is so necessary in this field. I may point out that the firm which is delivering this substance at Rs. 312 per kilogram has not done any research work at all. The originator of this drug, Roche has many years of research and development work to its credit. They have a large research staff in Switzerland, United States and the United Kingdom and this research staff cannot be diminished from one year to another. You know very well that if you have a qualified chemist or doctor on your staff, you will have to keep him on. Therefore, once we have built up a very competent team of research workers, our big problem is to obtain the necessary funds to finance the research that is going on, whether we make any profits or not. One of the problems that we always have to face is that people do not understand that there is a big difference between a company that does original work and one that does nothing at all and just waits for a drug to come out. I may also point out that an imitator, as we would like to call him, because he does not do any research work, is never

interested in a medically successful but commercially unsuccessful drug. You probably know that 90 per cent of the products of a business usually make 10 per cent of the profits and the balance of 10 per cent of a company's products usually account for 90 per cent of the profits. I do not say that this rule is always valid but it gives you an indication. I think it is characteristic of the pharmaceutical industry. Out of 100 products that a pharmaceutical company may market there may be only 10 per cent or even less that are commercially successful products. We expect the successful products to pay more of their share than the other products do. This is a principle of justice which, by the way, has been accepted by the income-tax authorities in over hundred countries in the world. For every commercially successful drug there are many other drugs which are medically useful but which because of their limited use, do not attain a sufficiently high volume of sales. Therefore, the commercially successful drug has to pay for research and development.

Shri Bade: Clause 95(3) says that the Central Government will do it only if it is in the public interest so to do.

Mr. D. H. Nowotny: The point is what you mean by "public interest". If you say that this is only an emergency clause to cover cases like war or where the market has not been supplied sufficiently at reasonable prices then it is different. So, first of all, we have to consider whether there is an emergency situation and, secondly, whether the market has been supplied.

Shri Bade: There is no question of an emergency. The question is only of public interest.

Mr. D. H. Nowotny: Mr. Haslam would like to answer it.

Mr. Haslam: Clause 95 is concerned with the ground of compulsory licence under clauses 84 and 85. The object of these clauses is to prevent a patentee

from simply sitting on an invention and to encourage the working of the invention in India. The aim of this clause, which corresponds to the section which has been for a long time in the United Kingdom Act, is to encourage the actual production of the patentee's invention in India. It seems to us that clause 95(3) is illogical in the context of clauses 84 and 85 in that having granted a compulsory licence for the purpose of working the invention in India, clause 95(3) suddenly allows the Government to import the invention, which has the very opposite effect of encouraging the production of the invention in India.

Mr. Chairman: Suppose, there is an epidemic in India and we are in urgent need of a medicine. It takes years to establish a factory and produce the thing. In that case, why not import it under certain conditions certified by Government? What is your objection?

Mr. Haslam: I think there would be no objection to any clause which expresses this clearly in terms of an emergency. Naturally, nobody would want to impose any restrictions in the case of a national emergency or an epidemic.

Mr. Chairman: Do you think Government will interfere unnecessarily? Unless there is an emergency or some special reason Government will not interfere. I can give you an instance; such a case happened in India. The Director, Haffkine Institute had forwarded an application dated the 27th May, 1941, to the Controller of Patents for onward transmission to the Governor General in Council praying for the grant of compulsory licences under Section 22 of the Indian Patents and Designs Act, 1911 in respect of patents Nos. 26513 and 26850 granted to Messrs. May & Baker, London. Briefly, the grounds under which the application was based were as follows:

The heterocyclic compounds, sulphathiazole and its derivatives which form the subject matter of the patents have curative powers in the treat-

ment of plague and a large number of other bacterial infections gonorrhoea and the infections of urinary tract. This drug was superior to anything invented before that nothing can take its place. In spite of the importance of the drug, the patentees, who get their patent in June, 1938, did not put it in the market till about December, 1940 and the quantity of the drug offered to the public was considerably small. They did not supply the required quantities at a reasonable price. They said that they were unable to supply. They frustrated the Government of India in the grant of compulsory licence and importing this drug. In such a case do you think it necessary to have the powers read out by my hon. friend to import the necessary medicine in the public interest; or, do you want the Government to allow thousands of people to die of such cursed diseases?

Mr. Haslam: Certainly not. Nobody would want to impose restrictions in circumstances of that kind. This section, however, I think, refers to "in the public interest".

Mr. Chairman: You can rest assured that only in such cases the Government will interfere and not in other cases.

Mr. Haslam: "Public interest" may be a short-term emergency or may be a long-term one. My understanding of the meaning of "public interest" as being behind this compulsory licence section is the long-term one, that is to say, the advantage of developing industry in India as opposed to importing patented goods from abroad. That is obviously something that is not done overnight; it has a long-term meaning.

Mr. Chairman: We are not concerned only with the development of industries but also with the health of the nation.

Mr. Haslam: I think, there would be no objection to a section which

said that the Government had the right in an emergency to import drugs notwithstanding any licence and so on.

Mr. Chairman: You have got similar provisions in the UK Act and also in the Patents Acts in Switzerland.

Mr. Haslam: Yes, Sir.

Shri R. P. Sinha: May I add that in England there was a case where the Health Ministry started importing large quantities of drugs for use in the National Health Service when the patentees in England refused to supply them at reasonable prices. The case went up to the House of Lords and the House of Lords decided that Government were perfectly justified in importing those drugs in order that the Health Service needs may be met. A thing similar to what you have mentioned occurred in England also.

Mr. Chairman: What is good for England must be good for India also.

Mr. Haslam: Yes, Sir; but you already have clauses in this Bill dealing with the right of Government to use an invention for the Services of the Government, what are called in the United Kingdom, the Services of the Crown, which was the matter which the hon. Member has just referred to. These clauses already exist elsewhere in the Bill. The objection to this particular sub-clause, 95(3), is merely that it puts into reverse, as it were, the object of the previous clauses, clauses 84 and 85, to encourage the development and production of drugs in India.

Mr. Chairman: How will it put it into reverse? This company, Messrs. May and Baker, refused to supply.

Shri R. P. Sinha: Even if there is an established industry in any country, just like in the UK, the Government thought it appropriate and proper in the public interest to import despite the fact that they were being

manufactured in England. So, there may be some occasions here when, in order to bring pressure upon the patent holders here to supply goods not only in adequate quantities but also at reasonable prices, the Government may exercise that power as the Government in the UK very recently did.

Mr. Haslam: In clause 100 you already have the power of the Central Government to use inventions for the purposes of Government. This clause in the Bill corresponds to the section in the UK Act under which the UK Government imported tetracycline for, what we call in the U.K., Crown use, and here Government use.

Shri Bade: That is for invention; clause 95 is for importation of medicines from outside.

Mr. Haslam: You use here exactly the same words as are there in the UK Act, namely, that the Government "may make, use, exercise or vend the invention for the purposes of Government in accordance with the provisions of this Chapter". I see no reason why that does not allow the Government to import if they want to. I think, we are arguing about the point where such a clause giving the right of Government to import should go in the Bill. Our feeling is that it should not go in the clause which deals with compulsory licences for the purpose of promoting industry in India but should be considered in the whole context of the use by the Government which occurs in later clauses, that is, clauses 99 to 102.

Shri Bade: I would like to invite the attention of the witness to clause 87. A difference is made in the Bill between patents for chemical substances and patents for medicines, drugs and pharmaceuticals.

In clause 95, clause 84 is also referred to. Clause 84 is again referred to in clause 90, which sets

down when reasonable requirements of the public are deemed not to have been satisfied. Only then will clauses 87 and 84 apply regarding the grant of compulsory licences.

Suppose a foreign firm is not manufacturing the item in India, and is not also giving the know-how to India, and at the same time, they have a patent from India and they have also a monopoly; suppose Government come to the conclusion that this firm is not manufacturing to an adequate extent but by creating a monopoly is exploiting the poor people; in such a case, why should clause 87 not be made applicable?

Mr. Haslam: Clause 87 applies automatically. Under this Bill, all patents in the chemical field are endorsed with the words 'licences of right'.

Shri Bade: I am talking of clause 84.

Mr. Haslam: If this Bill is passed in its present form, there will never be any need to apply clause 84 in a chemical or pharmaceutical case, because all those patents would be endorsed with the words 'licences of right' anywhere, so that it does not really arise.

Shri Bade: You have only objected to clause 88, but you have not said anything on the question of royalty where a maximum of 4 per cent only has been prescribed. What have you to say on the question of royalty?

Mr. Haslam: We do think that the royalty limit of 4 per cent is unrealistic.

Shri Bade: What is the reason for it?

Mr. Haslam: This is an economic question. May I ask my colleague Mr. Nowotny to deal with this question?

Mr. D. H. Nowotny: The reason why we have to ask for a higher price for

an active substance that we send from Switzerland, than an Italian imitator, is that we have to cover our research and development costs. As you know, our research and development costs are running around 8 to 10 per cent of the whole turnover, and if we put the research and development costs into relation to the turnover of the patented products only it may be much higher.

Shri Bade: Clause 88(5) reads thus:

"...the royalty and other remuneration reserved to the patentee under a licence granted to any person after such commencement shall in no case exceed four per cent of the net ex-factory sale price in bulk of the patented article.....".

Mr. D. H. Nowotny: As I have said, our research and development costs run around 8 to 10 per cent of total sales; the question is whether these costs are applied to the selling price of the final pharmaceutical speciality or the bulk price of the active substance. The latter is only a small part of the final selling price. Let us say research and development costs are 10 per cent of the final selling price of a speciality. If they should be expressed as a percentage of the bulk selling price, the percentage would be much higher; it can be 30 or 40 per cent or even more. I can give you an example, if that is necessary.

Shri Bade: He may send that to us in writing.

Mr. Chairman: You may give us a note.

Mr. D. H. Nowotny: Yes, I shall do so.

Shri R. P. Sinha: Witness has stated himself that clause 100 of the present Bill is based on an equivalent section in the UK Act, namely section 46, and it is more or less worded on the same lines. Since the provision in the

UK Act was not very clear, a litigation arose in the House of Lords when Government started importing it. To safeguard against such litigation in India, we have tried to clarify the position in clause 95(3) by providing that Government could import also, because in the UK case the point at issue was that the Government could use the patent but not import. What I am stating is this. There, the law has been settled by a judicial pronouncement. We do not want another judicial pronouncement in this country to settle the law. Therefore the legislature here is taking a precautionary measure by having Clause 95(3). What objection have you got to that?

Mr. R. A. Willens: Section 100 can be omitted, but the real point, as I mentioned originally, is that section 95(3) does give a permission to the licensee which is denied to the patentee. If this clause is meant to deal with such emergencies as plague, infection, calamity and that sort of thing, it does seem to me to be inconsistent not to use any means available to import the materials required whether by the licensee or by the patentee. What I am suggesting is that it will remove an injustice if not only the licensee but also the patentee is given freedom by the Government to import.

I should add a further detail, that this will not only apply to compulsory licences under section 84 and 85 but also to licences of right under section 87, and under section 88(6), which is subject to the conditions of licences provided in section 87, licences of right are applicable not only to pharmaceutical material and foodstuffs but also to chemical products absolutely without exception. That is to say, it covers the entire chemical industry, which is of course our particular concern. Section 88(6) reads:

"Save as otherwise provided in sub-section (5), the provisions of sub-sections (1), (2), (4), (5) and 807 (B) LS-24.

(6) of section 93 (regarding the powers of the Controller) and of sections 94 and 95 shall apply to licences granted under this section as they apply to licences granted under section 84."

So, you see section 95 refers to section 84, and section 88 makes it clear that it refers also to section 87. This is our legitimate comment on the meaning of the Bill, and this will answer the proposition that section 95(3) is a good alternative to section 100.

Mr. Chairman: Please see section 47(1), which is only subject to clause (2). He can import, he can sell, but suppose he does not import in sufficient quantities at reasonable prices, what is Government to do? Then comes section 100. It is only the Central Government which can exercise that right, not the Controller.

Shri R. P. Sinha: The witnesses represent the entire industrial and chemical community of the European countries. Countries like U.K. have got provision for licences of right. I would like to know how far this clause is used for giving licences to other than patent-holders for the manufacture of the patented articles.

Mr. R. A. Willens: As regards the U.K., I should first make the observation, to avoid misunderstanding, that the licence of right in the U.K. is something different from what is contemplated in this Bill. It is a voluntary concession on the part of the patentee. He requests the Controller to endorse the patent for licence of rights and thereby he gains himself advantages, namely reduction in the renewal fees payable.

Shri R. P. Sinha: In the U.K. Act, there is also a provision for compulsory endorsement of licence of rights. It is not only voluntary under section 37.

Mr. R. A. Willens: That is quite true.

Shri R. P. Sinha: What use has this section been put to?

Mr. R. A. Willens: These are the same grounds as those specified in section 37 of the Act, and merely extend to the government departments the right to initiate proceedings which are indeed available to anybody else under section 37. So, it is the same thing. But it is different from the provisions of the right in the case of clause 87 of the Bill which is automatically given irrespective of any request on the part of anybody, whether it is a government department or a licensee.

The answer to the other part of Mr. Sinha's question is this. From the report of the Controller-General for Patents, Designs and Trade Marks for the year 1965, it is very clear that very little use is made of this provision. It is not necessary that it should be very much used. The extent of the provision and the possibilities that anyone can go to the Controller and insist on having a licence persuades the people to grant licences more easily. So, in fact, as is stated in the Controller-General's report, the number of compulsory licences under section 37 is very low, taking the figures from 1956 onwards.

Mr. Chairman: It may be rarely used, but don't you think that the presence of this section is a corrective?

Mr. R. A. Willens: Yes.

Mr. Chairman: Similar, should not the provision for compulsory licence which can be granted in respect of any article of food, medicine, etc., be retained? It is in section 41 of the U.K. Act. Why should you object to such a provision in our Act. What is good for the United Kingdom is also good for India in this case. I am referring to the clause on compulsory licence.

Mr. R. A. Willens: One can have no objection to the provision for com-

pulsory licence, in appropriate cases, and many of these cases are appropriate.

Mr. Chairman: The same is found in Switzerland also. A compulsory licence may be granted by the court within three years from the date of registration of patent. It may be revoked also in certain cases.

Mr. R. A. Willens: It is very normal.

Mr. Chairman: Then, why do you object to the provisions in India?

Mr. R. A. Willens: Section 87 goes far beyond anything in the provision of any United Kingdom Act, because it is quite automatic, and it does not require any application on anybody's part. It is purely automatic and comes within the subject of invention.

Shri R. P. Sinha: May I take it that you do not object to the licence of rights as such when this is being endorsed by the Controller or from the Government in the case of a patent. What you object to is the automatic endorsement of all the patent licences as described in section 37.

Mr. R. A. Willens: That is quite right.

Shri R. P. Sinha: What is the experience in Switzerland and other European countries? What is the amount of profitability in the patented drugs or goods or chemicals. By how much is the selling price of patented products higher than the cost of production? We are told that some of the patented products in India sell at 400 per cent more than the cost of production. What is the average? Could you give us some idea of the general profitability in respect of the patent products in the European markets?

Mr. J. Egli: May I ask Mr. Nowotny to answer this specific question? But before he answers. I would say that in regard to the compulsory licence system which was referred to by the

Chairman, while I am not a specialist in patents, I may point out that for years and years, maybe 10 to 15 years, there are no compulsory licences given by the Swiss authority because nobody asks for them. We have not problem in this field.

Mr. D. H. Nowotny: I would like to answer the question that the hon. Member has put. I do not think that we are in the position to give a general rule, at how many times a patented drug sells for based on its production cost. I do not think that any company in the whole industry can give such a figure; I do not think a figure like that exists. As I told you before in the pharmaceutical industry, we depend mainly on the medically and commercially successful products or drugs. Under the patented products, you will find a series of pharmaceuticals that are merely medically useful. Therefore, the selling price of such a pharmaceutical products could be fairly close to its main production costs. That means if you are adding the research and development costs and medical information expenses, and general management and administrative overheads, you may find yourself making a loss on this specific products. On the other hand, you will have a few commercially and medically successful drugs and these commercially successful drugs are the main contributors to the common pool out of which research and development is being financed. It is difficult for us to give an average, but all I think we can say is this: in the experience of the pharmaceutical industry of the world, and I must refer to American figures, we know that the very well-managed international companies usually make a profit of 10 to 20 per cent on sales. So, I think this might be an indication of what is left after you have not only provided for production costs but after you have covered the research and development costs as well and all the medical information and administrative costs and after you have paid the taxes.

Shri R. P. Sinha: What percentage of profit after paying taxes will attract a suitable market for exploitation?

Mr. D. H. Nowotny: This is a very pertinent question. In an industry like the pharmaceutical industry, which is under pressure to look for new products, partly to replace the older ones, probably 10 to 20 per cent profit after taxes would be regarded as sufficient. There is an interesting study made by a French management consultant recently which has been published in a book in French—["*Morale de l'entreprise et desfin de la nation*"] the title can be roughly translated into English as "The Ethics of Business and the Fate of the Nation". Enterprises are divided in this book into three groups. The first group of companies makes a profit of 7 to 10 on their capital invested; they do not innovate very much. The second group makes 10 to 20 per cent profit on capital invested. Into this category fall most of the well-managed companies that account for a lot of innovation like the pharmaceutical industry, automobile and aircraft industry and electronic industry. The third group makes a profit of over 20 per cent. It comprises usually smaller companies who through hard work and maybe some luck also have achieved a scientific breakthrough. This is a very temporary affairs and these companies need that high return for reinvestment and consolidation of their position. In the pharmaceutical industry, the costs of research and development are going up every year. If you realise that research costs are going up in a steeper way than sales do, I think 10 to 20 per cent profitability after tax is not exaggerated.

Shri R. P. Sinha: Has this book been published in English?

Mr. D. H. Nowotny: No.

Shri R. P. Sinha: Will you send a copy of this book?

Mr. D. H. Nowotny: I will send the French copy. You can have it translated.

Shri R. P. Sinha: The leader of the delegation has been talking about the inhibiting nature of this Bill in regard to inflow of foreign capital and technology in this country in the field of chemical and pharmaceutical industry. Now you have said that 10 to 20 per cent profitability will be able to attract foreign capital into India. According to the Reserve Bank of India Survey made in 1965, the chemical and pharmaceutical industries in India have been drawing a net profit, after taxes, of about 17 to 12 per cent. Is that not a sufficient incentive for foreign capital to come into India?

Mr. D. H. Nowotny: I have not seen these figures, but we must be very careful when we talk about return on investment as to what we mean by it. Some of the foreign companies which have come to India and invested not only in the pharmaceutical industry but in the basic chemical industries have very large research investments outside India. In England, a calculation was made by the Government about the profitability of American pharmaceutical companies and the astonishing figure of 40 to 50 per cent was mentioned as their profitability. These figures had to be adjusted later on, because it was found that the American subsidiaries in U.K. were largely profiting from the heavy investments of their parent companies in U.S.A.

Dr. C. B. Singh: You talked about the huge expenses on research, etc. Suppose you carry out 1000 experiments. What will be the percentage of the successful pharmaceutical products produced out of those experiments?

Mr. D. H. Nowotny: If you are conducting chemical and medical research on 4,000 to 5,000 chemical substances, you will usually get a commercially viable product only in one case. So, we have to screen 4,000 to 5,000 chemical substances to produce one drug. I would even go further. This one drug that is marketed does not mean that it will be commercially successful. Pro-

bably you would have to look at it this way, that if we screen between 40,000 and 50,000 chemical substances, out of these 40,000 to 50,000 substances only ten substances will be marketed and out of these ten substances that will be marketed only one will be a real commercial success. This is the reason why we always emphasise so much the importance that not one product, namely, the most useful or successful one is singled out out of the company's total product line but that all products are taken together as one unit.

Dr. C. B. Singh: Evidence has come before us that in the last 15 years out of the successful patents which have been put in the world market, U.S.A. is the leading country with 355 items to its credit, Switzerland 44, Germany 33, U.K. 28, France 21, Australia 1, Italy 1 and India 1. Could you explain the reason why U.S.A. has 355 and Italy only 1?

Mr. D. H. Nowotny: I do not think we have to go too far to find an explanation for this situation. In the United States, patent protection is very strong. You do not only have process patents but you also have product patents. The U.S.A. have one of the strongest patent protection in the world. In Italy you do not have any patent protection at all. I think there is now a Patent Bill being studied by the Parliament. There is no pharmaceutical company which can really run the risk of employing a large research staff and continue to make research for many years if there is no guarantee that if it achieves success it will have a temporary monopoly on that successful product. We know that one of the basic aims of patent protection is to stimulate the inventor. This is what has been said 500 years ago, if you remember, in the preamble of the Patent Law of the Republic of Venice in 1474, where it was stated quite clearly that patent laws are there to stimulate the inventor. I think patent protection explains why there are such wide differences in the creation of new products.

Dr. C. B. Singh: It has become evident that the distinction between 'process' and 'product' is getting thin and thin. Do you agree with this statement?

Mr. R. A. Willens: I think it is fair to say that in the general case there is no difficulty in having both claims, for process and product, if it is appropriate. The amount of cover afforded by such a patent is really no greater than that of a patent which covers either the product or the process. It has the advantage that the enforcement of protection is a little easier. In some countries it is thought better not to have patents for products. In such cases if the matter is to be protected at all it must be in terms of the process. In such countries, if there be a new product, the onus of proof, to prove that it is not produced by the patented process but by some other process, is placed on the man who has the product and not on the patentee.

Dr. C. B. Singh: Do you think it will be advantageous if in the new Bill that is before us provision is made to give patent protection for products, along with the process as well?

Mr. Haslam: I think that would be of great advantage. I think the weakness of process cover in many cases where new substances are discovered having valuable properties, is that with modern chemistry at the high level that it is today, it is possible to think of many ways, sometimes as much as a dozen ways in which a substance can be made. If patent cover is only to the process it wastes a lot of time for the inventor to have to patent all the feasible ways of making the substance. The real invention lies in the discovery of its properties rather than in the process by which it is made. Once you give the information that such and such substance is valuable for a certain purpose, a competent chemist could find many ways of making that substance. It is merely to cover these which are well-known to chemistry that patents are taken.

Shri Kashi Ram Gupta: In the last paragraph of your memorandum it is stated:

"Should the Bill in its present form pass into law, European chemical companies will be forced to re-assess their plans for investment in India and may also have to consider seriously the implications for the sale of licensed know-how."

How does the Patent Bill affect the licensed know-how?

Mr. R. A. Willens: The common practice in licensing a patent is that not only should the licensee be given proper leave to carry out the process or produce the product, as the case may be, but he should have the benefit of patentee's detailed experience. This is the know-how that companies obtain. In the case of unenforced licensing agreement the patent is licensed and the know-how is transmitted freely and it is generally on extremely friendly terms. The patent has a great advantage that it thus serves as a bar to anybody else using that extremely valuable know-how that has been transmitted along with it. This is the way it normally goes in the licensing field. If the know-how is not required on the one hand, or if the licensor is not willing to transmit it on the other hand, you have a bare licence. It is mere permission to infringe the patent without any know-how being transmitted. This can arise in two ways. The way we are concerned with at present is where a licence is compelled, either by the action of the Controller, or the Government, or the operation of section 87 of the law providing for a licence of right. The licence can be compelled but no one can be compelled for transmission of know-how which is essential for manufacture. A bare licence is also commonly used where the company is well-versed in that field and wants to simplify some of the operations. Generally, the subject matter is not of interest to the patentee and what the licensee wants is mere

permission to ignore the patent and, if the licensor has no objection, he allows him to do that for a small consideration. Then that licence is granted which is a simple matter.

Shri Kashi Ram Gupta: Know-how is not necessarily connected with the patent Bill.

Mr. R. A. Willens: It is perfectly true that know-how is not connected with the Bill. However, in practice it is generally the case that one is dealing with a variety of processes, not just one simple thing; more than one patent would be involved and a body of know-how would be involved and it would be quite impossible to disentangle one from the other. Some of the know-how would be intimately connected with one of the patents, perhaps more than one and some of them undoubtedly not; but some it will be impossible to say whether they are connected with the patent or not.

Shri Kashi Ram Gupta: You have mentioned many European countries in your memorandum. Are the patent laws of those countries identical with respect to period, licence of right and compulsory licence?

Mr. R. A. Willens: I think in general the laws of most of the countries are uniform. I am afraid I cannot really answer in detail on this question. They are uniform and I would be surprised to find otherwise. The laws of all countries provide for the imposition of compulsory licence in the event of non-use provided, of course, that under the terms of the international convention there is suitable lapse of time to give the patentee a chance to carry out his invention and provided also there is a reasonable return to the patentee for his invention, whether he has been able to use it or not.

Mr. Chairman: You have provided three years.

Mr. R. A. Willens: Yes. It is a standard period imposed by the Paris Convention.

Shri Kashi Ram Gupta: Are the European countries exporting countries or importing countries in this field?

Mr. R. A. Willens: I think we are both exporting and importing countries.

Mr. J. Egli: I think I can answer that question. Germany, Great Britain, Switzerland and even France are producing pharmaceuticals and I think all these countries have a rather high export market. But they have also a very strong import because normally no trade barriers exist. But if you take the Scandinavian countries and other smaller countries where the pharmaceutical industry is not so highly developed and is not so large, I think the imports are higher than the exports.

Shri Kashi Ram Gupta: So far as the developing countries are concerned, I think their laws must be substantially different from the laws of the countries which are highly developed. If you compare our patent law with the laws prevailing in the developing countries, do you find any difference?

Mr. Haslam: As I understand it, what is in the questioner's mind is as to what extent patents pay a part in developing a country.

Shri Kashi Ram Gupta: The point is that the difference in patent laws in regard to certain points might suit developing countries and, therefore, they may differ from those of the developed countries. Secondly, have you compared the laws of the various developed countries with our own laws?

Mr. Haslam: As far as I know, the laws of almost all countries in the world are more or less the same in this respect, that is, about the use of inventions and the penalties imposed upon not working an invention in the country concerned. I can say quite categorically that there is no country in the world that has provisions any-

where parallel to the provisions provided for in the Indian Patent Bill. They do vary slightly from the one to the other. As you know, in the UK drugs are treated differently from other substances. But we make no difference between chemicals and any other type of invention. In some countries, which have not acceded to the Paris Union, failure to work a patent does result in the forfeiture of the patent right. This is the most extreme penalty. But no country imposes a licence of right system on any class of patents right from the moment the patent is obtained.

The thesis that my organisation is trying to put forward here is to explain how the patent laws of your country have provided only limited protection and how this acts as a disincentive to bringing know-how into the country.

If I might refer to the question that the hon. Member asked earlier on, I could put an imaginary situation. Suppose, I am a patentee in UK and I want to exploit my invention in India and in Switzerland. I want to do this by granting licences. Behind this invention there is a good deal of know-how which must be passed on before it can really be put into proper and efficient commercial production.

Now, let us assume that this Bill is passed in its present form. Then, may I compare the two situations that I would be faced with in the two countries? In Switzerland, I would know that anybody with whom I have made an arrangement would have the exclusive licence, that he would not be subject to competition, that he would be willing to pay me reasonable royalty, that any know-how that I pass on to him would be confined to him solely, that I would have rights against anybody else who took it from him and that he would have rights also and we would be able to enter into a friendly, carefully worked out arrangement which will be economically and technically satisfying to both parties. On the other hand, if

I wish to do such an operation in India, I would have many difficulties.

Shri Kashi Ram Gupta: Under the present law? Not under the present Bill?

Mr. Haslam: Under the present law the situation is equally satisfactory because I can enforce the patent and I can make a good arrangement; but if the Bill were passed in its present form, I would know that anybody can come along for a licence and, therefore, I cannot give my intended partner any sort of exclusive rights. Therefore, I would have no knowledge that this know-how that I wish to pass on would be exclusive and would bring me a return. I would be simply throwing it into an almost open sea. I will not say that I will not do it. Also, I will not say that the flow of technology would stop; but, what it would mean would be that I would be in a much less secure and a much more doubtful position and if there was a situation of my wanting to develop this invention in the Far East and I had to choose between India and Japan, with India having the Bill as suggested here; I would probably say that I would prefer to exploit this invention in the Far East in Japan where there are more secure patent laws. It will be all the time a drag and representing a disincentive to enter into arrangements in India.

Shri Kashi Ram Gupta: Formerly, the practice was that the period of the patent was counted from the date of application but some countries preferred that it should be from the date of grant of the patent. Are you also in favour that the period should be counted from the date of grant of patent rather than from the date of application?

Mr. Chri-man: What is the position in England?

Mr. Haslam: In England it is 16 years from the date of filing the complete specifications.

Mr. Chairman: We have put in 14 years from the date of application for things other than drugs.

Mr. Haslam: The two countries which go by the date of grant are the US and Canada; most of them go by the date of application.

Mr. Chairman: What time do you take to grant a patent in England normally from the date of filing the application?

Mr. Haslam: The maximum time that is allowed to the Patent Office is now three years from the date of filing the complete specifications. From the date of filing the application it is about four years.

Mr. Chairman: What percentage of profits do you invest in research in England?

Mr. J. Egli: I have no figures of what is invested in research work in Great Britain.

Mr. Chairman: Can you get it for us?

Mr. Haslam: I think, we could find it for you.

Mr. Chairman: In your Act also you have got restrictions on the manufac-

ture of foods and medicines and for the grant of compulsory licences. Have those provisions in any way affected your own industrial development?

Mr. Haslam: I do not think they have exactly affected the growth of industry. One could not say that they have stultified it. But as they are used more and more, they act as one of the disadvantages of putting money into research. They have not gone to the extent where one would say that it is not worthwhile investing in research because of these provisions. That would be going too far. But I think a good deal of feeling is aroused against the people who make use of these provisions, in that they are people who, we feel, are taking advantage of all the effort and research that is being done and are simply cashing in on the efforts that other people have made to develop the new products.

Mr. Chairman: Thank you very much, gentlemen.

Mr. J. Egli: Mr Chairman, may I just once more thank you very, very much for the kindness that you have shown us on this occasion.

(The witnesses then withdrew.)

(The Committee then adjourned.)

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965.**

Tuesday, the 5th July, 1966 at 09.30 hours

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman.

MEMBERS

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2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Dinen Bhattacharya.
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18. Shri A. T. Sarma.
19. Dr. C. B. Singh.
20. Dr. L. M. Singhvi.
21. Shri P. Venkatasubbaiah.
22. Shri Balkrishna Wasnik.
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Rajya Sabha

24. Shri Arjun Arora.
25. Shri Vimalkumar M. Chordia.
26. Shri B. T. Kulkarni.
27. Shri P. K. Kumaran.
28. Shri Shyamnandan Mishra.

29. Shri Dalpat Singh.

30. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.

2. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

- I. 1. Prof. Gino Bergami, *Director, Institute di Fisiologia Umana Università (Naples).*
2. Dr. Giorgio Delgiudice, *Leodoga SPA Lepetit, Via Andrea Vesalio 6, Rome. (Assisted by Mr. Gabriel Brohamasha as Interpreter).*
- II. Federation of Economic Organizations of Japan, Japan Pharmaceutical Manufacturers' Association and Japan Pharmaceutical, Medical and Dental Supply Exporters' Association, Japan Patent Association, Tokyo.

Spokesmen

1. Mr. Shoichi Inouye, *Senior Managing Director, (Assisted by Sardar Hem Singh, as Interpreter).*
2. Mr. Shoji Matsui, *Patent Attorney.*

Prof. Gino Bergami, Naples and Dr. Giorgio Delgiudice, Milan (assisted by Mr. Gabriel Brohamasha as Interpreter.

you want to add something to that, you may do so. Afterwards, the Members of the Committee will ask questions or seek clarifications and you may answer them.

The witnesses were called and they took their seats

Mr. Chairman: We have received your Memorandum. Your evidence shall be treated as public and is liable to be published unless you specifically desire that all or any part of the evidence tendered by you is to be treated as confidential. Even though you may desire your evidence or any part of it to be treated as confidential, it shall be made available to the Members of Parliament. If you want to stress any particular point or points mentioned in your Memorandum or

Prof. G. Bergami: Mr. Chairman and Hon. Members of the Joint Committee: My colleagues and I feel honoured to be with you today. We have come of the way from Rome and Naples in Italy to share our thoughts of a subject with which we are familiar and which is of vital importance to developed and developing countries.

Before I introduce my colleagues and myself, I wish to pay you the most hearty compliment for your readiness to hear the views of experts from other countries. As much as I know about the parliaments of many

other countries, your approach may be unique and for excellent reasons. It shows in a very impressive manner how liberal democratic and progressive your parliamentary institutions are. We have nothing but admiration for the manner in which Government and people of India have recently faced the tremendous problems that are before you.

Apart from our general qualifications of competence to speak on the subject under discussion today, I may be permitted to say that in my own person I have some special affection and regards for this great and ancient country. I always wish for your progress and prosperity. I represent no special interest nor any industrial enterprise and my only interest is the welfare of the people of India.

Let me now introduce myself. I am an university professor teaching Physiology in the University of Naples with a medical and biochemica' background in the field of Applied Biology, Pharmacology and some personal experience in the field of public health problems and sanitary legislations. It has happened to me to be nominated, immediately after the War, High Commissioner for Public Health in order to reorganise the public health service in Italy destroyed by the War.

I have been for many years the member of the Italian High Council of Public Health, the technical body consulting the Government in sanitary matters and I have particularly studied the problems related to drug production, controls, etc. Last year, I was heard in the Italian Chamber of Deputy as an expert for the problem of drug patentability. In consideration of the fact that I am not an expert in economic, and I cannot answer the questions of industrial character and in order to give you the greater possibility to have direct information relating to the Italian situation, I have asked the Italian Association of Pharmaceutical Producers to nominate a delegate to be at your disposal to answer clearly to any variety of ques-

tions that are likely to be put to us. Dr. Zerilli-Marimò was nominated and he prepared the memorandum that has been sent to you yesterday. He was unable to come to New Delhi because of sudden ailment and his place is taken by Dr. Delgiudice, the economic expert of the Association. I have the great pleasure to introduce him to this hon. Committee and I have great pleasure to introduce also Mr. Galbridd Brohamasha who will be our interpreter and will facilitate our task.

Now, I come to my Memorandum. In the Memorandum that I sent to the hon. Committee, as you certainly remember, I tried to enlighten the Italian situation after a long experience of no-patents on drugs. Let me now explain more in detail the most important points. How was originated the law according to which no patent was granted for the production of drugs? How the Italian drug industry developed and how the Italian drug industry has been affected by this law? Why the Government is willing to change the no-patent policy? Which is the type of the Italian draft Bill and what are its salient features?

Coming to the story of this law, may I say that about one hundred years ago, to be precise, one hundred and sixteen years ago, the Italian Subalpine Parliament, after a long discussion, approved a law excluding the patent protection to pharmaceutical products.

It is interesting to analyse as to what motivated this decision to be taken when the pharmaceutical industry was practically non-existent. At that time any kind of medicine was prepared in the pharmacy by pharmacists following the recipe of the physician and the real pre-occupation of the Italian legislator was to avoid that the utilisation of a good recipe, should be inhibited by patents. The main aim of the law was, therefore, to protect the freedom of prescription of the physician, avoiding that a patent previously given to another physician or to a pharmacist should

prevent its use. The same law, for analogous reasons, was at the same time adopted in France and for many many years, in France and Italy, no patent was issued to any pharmaceutical product. But little by little, with increasing industrialisation in the production of drugs, the preparation of drugs shifted from the counter of the druggist to the laboratory of the industry, originating a new situation, characterised by the introduction of what we call "medical speciality", with fancy names, sold in finished form, ready to use.

New regulations were issued, both in France and Italy—because pharmacopoeia was no more sufficient to guarantee the quality of the medicine sold to the public in finished form—dealing with the need for control of efficiency and tolerance of the ingredients of the medical specialities. But to make control efficient, you must know the composition, and for that reason, compulsory declaration on the labels of all the constituents was prescribed. Secret formula was no longer allowed and this originated the problem of the protection of the rights of the inventor of the new drug in consideration of a very good incentive given to the research in other fields by the patent system. The French legislation was later modified; so they have now a special drug patent for medicines, whereas in Italy a very long legal controversy started, because of some unfortunate series of circumstances. After a long discussion on the interpretation of the law of 1859, prohibiting only the product patent but silent about the process patent, in 1934 a law was issued providing in Section 16 for the patentability of the process patent for drugs. The law provided that it should conform with special regulations to be issued later. Unfortunately, some technical difficulties arose in the drafting of the regulations, mainly because of the difficulty to organize the evaluation of novelty; many years elapsed and the regulations were not issued until 1939 when a new decree was issued giving to the

Government the power to regulate all the matters. Strangely enough, the patent decree issued in 1939, in Section 14, in contradiction with Section 16 of the previous law, ordered that no patent should be granted for process of drugs, originating a legal controversy on the legal validity of the law. After many years of discussion, in 1957 the Supreme Constitutional Court confirmed that legally the patentability of drugs, also as patentability of process, was still not allowed and invited the Government to draft a new law. Many drafts were prepared and finally now we have a draft bill, which is at present in the High Chamber of Senator for approval. As I wrote in my Memorandum, we have never had a patent law for drugs and this not as a result of a pre-arranged governmental policy, but as the result of concomitant legal controversies which have bereaved the efficacy of the 1934 law, never enforced.

So we have had, in Italy, the strange situation of having full patent protection for all the chemical industries with the exception only of the chemical drug industry. We will see later the different results obtained in these two different branches of the chemical industry.

Having spoken of the story of legislation, let me now examine the development of the Italian drug industry. This examination will be done by me in the light of the non-patent system. Generally speaking, the degree of development of the drug industry may be classified into four stages:

- (i) when practically all drugs are imported and local industrial production does not exist;
- (ii) when industrial production is limited to the packaging or formulating drugs imported in bulk and no production of basic drug is operating;
- (iii) when a substantial production of basic drug is operating; and

- (iv) when the production capability is increased and there the technical possibility for producing all drugs when economically convenient.

Until the First World War, the Italian drug industry was near stage 3, mainly devoted to the packaging of drugs imported in bulk; the production of basic drug was limited to a few items. With the First War, the disappearance of the German medical specialities stimulated the local production of some important basic drugs. After the First War, the situation changed very little and although no one drug was patented, foreign producers continued to export in Italy their products, while the Italian industry took no major interest in the reproduction of imported drugs. The reason for this lack of interest can be found in the following facts:

- (i) No one product was of such a therapeutic importance as to guarantee a large market.
- (ii) The expected cost of local production was not competitive due to the sub-critical mass production foreseeable.

The situation was static till the discovery of sulpha drugs—discovery of the greatest therapeutic importance, i.e., after about 1936. This was the first time the Italian industry took advantage of the lack of patent, reproducing the original product and the new derivatives that followed.

But the consumer had no economic profit of the local production because the prices were practically the same as that of the imported products, due to the fact that the originator was not compelled to charge substantial cost of research.

As a matter of fact, the inventor of sulpha drugs patented a complex molecule and was not aware as was demonstrated by other researches, that only a small part of the molecule was active. So it happened that the burden of the cost of research was practi-

cally supported only by the firm which originated the first product, while the new-comers obtained patents for new derivatives without too large expenses in research. So apparently the prices of sulpha drugs were not so high and the greater cost of small domestic production practically counterbalanced the cost of the royalty not paid.

The situation changed completely after the Second World War when in twenty years many new drugs of tremendous importance were introduced in the world market. A great number of the new drugs were the result of very heavy investment in research, representing in many cases millions of dollars, and consequently their prices reached a level never realised before.

For the first time in the history of drugs, the structure of the price of the new drugs changed drastically leaving a substantial research cost to be recovered by the originator during the life of the product. Obviously the large margin existing in these cases between the pure production cost and the selling price, induced many small Italian firms to start production in spite of the expected low yield, due to the lack of know-how and the small production, largely counterbalanced by the fact that they have not spent money in research. So it happened that the number of small drug enterprises in Italy increased enormously reaching more than 1000 units, more than in the United States.

This multiplication of drug producers created two different effects.

The first effect was the flooding of the Italian market by a very large number of specialities almost identical. For example, for each new product which appeared on the American, English, French or Swiss market, 10-20 or more products appeared in Italy, almost of the same composition, but all sold under different names.

The second effect has been the availability, in bulk, on the pharma-

ceutical market, of new products elsewhere patented, generally sold at a very low price because the producers have no research cost to charge, and because their profit was mainly based on the sales of the related speciality and the bulk sales being mainly directed to permit a substantial industrial production in order to reduce the general expenses.

In both cases there was no economic advantage at all to the Italian consumer, because, in order to meet the larger promotional expenses, due to the great number of competitors for the same product, prices have been maintained in an order of magnitude of the original product, comprising the research cost, and the low price of the product in bulk has been utilised only for some export business where and when no patent protection was enforced. I have given in my memorandum one specific example to substantiate this.

It is thus clear that as yet, lack of patent protection has not been of any advantage to the Italian consumer because the savings of possible licence payments are counteracted and even exceeded by the larger advertisement costs necessary to establish one's own product in a market among about twenty like products.

In fact as could not otherwise be expected, this excess of competing products, which practically have the same price as the original product and thus do not exert a price-fixing effect, has resulted in an enormous wastage of free samples and increase in advertisement costs. This has made expensive both to launch a new product and to keep the doctor aware of the products already established, in order to prevent replacing them by others almost identical in price and composition.

In conclusion the Italian experience demonstrates that, whereas the lack of patents in the drug field has not had the effect of lower prices for the consumer, in the meantime has been

an hindrance for the few important Italian drug manufacturers.

As a matter of fact only small or medium-sized producers have entered the market with copies of patented drugs, starting the production only when from the clinical investigation results published by the original producer, or from the preliminary sales in the country of origin, potential market in Italy was foreseeable, capable of paying the cost of a small-sized production sold at the same price as of the original producer, taking in this way undue advantage of the absence of research cost.

Objectively we must recognize that the lack of patents has had a negative effect on the best part of the Italian pharmaceutical industry, burdened with the increasing cost of research, and obliged to fight with competitors copying freely the best products originated by others.

In conclusion our experience has clearly demonstrated that the lack of drugs patents has badly influenced the development of our best pharmaceutical industry, when compared with the very good results obtained in Italy in other branches of the chemical industry protected by product and process patents. If we look at the good achievements of the Italian chemists in other fields, we have very excellent results and a large number of patents. The only exception of the pharmaceutical industry.

It will be convenient to examine at this point the future trend in the pharmaceutical industry. As you certainly know a tremendous amount of money is yearly invested in drug research in all the industrialised countries. This heavy investment, increasing every year is required because the pharmaceutical research is completely different from all other types of industrial research. If for instance we consider an automobile factory, the management can easily make

research programme for a new type of engine. The technicians will do their best; the result may be more or less successful, but in any case the research department will be able to give the management a new engine. In the case of the drug industry the picture is completely different. The management may ask the research department to find a new remedy for hypertension, but nobody can assure that a positive result will be achieved. We can give any quantity of money; we can enlarge the laboratory, asking for a remedy for cancer, but nobody can forecast the results. What we know is that on an average only one product out of 3000 or 4000 new products shows promising activity as a new drug and when we say promising activity we say that we have in hand not a product but only a probability of success.

And now we can forecast that in the next decade, very few new products will enter the market at a tremendous cost of chemical, biological and clinical investigation. This means that new products will certainly be charged of substantial amount of cost of research, that should be paid by the State or by the industry.

We must therefore make our choice State research or private research. I must recognise that I am not fully confident in the efficiency of State research in the pharmaceutical field. My opinion is absolutely not based on political reasons, but on the observation of the very important results obtained during the last 20 years by the Soviet Union in all fields with the only exception in the field of drugs. I have the best consideration for the high scientific standing of my Russian colleagues in all fields and I know also that the drug research is very active. Therefore, the explanation should be found in the peculiarity of the new drug research, requiring the largest possible freedom individual freedom, of research. Let me give you one example. It happened many years ago that an American company—I remember it is the

Lilly Company—received from a tropical country a flower plant called *Vinca Rosca*, which was locally used for treatment of diabetes. They tried to extract the active principle of the plant, but they found that there was no effect at all on the blood glucose or on diabetes. In the meantime, one researcher found that after the injection of the drug into a rabbit, the leucocyte (white blood cells) diminished. So it was discovered that the drug had the effect of reducing the number of leucocytes (white blood cells) and was later utilised for treatment of Hodgkins disease or leukemia. This result of research was due to a very large amount of freedom. This is why State research is not good because this kind of freedom is not there. It may reduce the number of new inventions. So we should give a large amount of freedom in research.

Personally, I am in favour of the co-existence of a State research, mainly basic research, with a private research, mainly applied, stimulated by an efficient patent system. Our experience in Italy has demonstrated to us that the problem of prices of drug is practically independent from the problem of patent. Prices to the public in Italy are of the same order of prices in countries having the patent—like France, England and Switzerland—and, what is more impressive, the prices of the biggest Italian producers who pay voluntary royalties to the foreign inventors are the same as the smaller producers who pay nothing at all. We have also noticed that multiplication of producers in the drug market increases the price because of the higher cost of promotion and the low yield of the small production unit, inferior to the critical production mass peculiar to each product. For all these reasons, Italy is now changing its drug patent policy.

It may be of some interest to you to note the fact that the Italian Government is preparing a five-year economic development plan and recognising the importance of the re-

search in the sanitary field, has clearly indicated in section 6 of the official plan that the pharmaceutical research will be mainly stimulated adopting the patent protection for the production of drugs. A Bill, introducing the process patent, has already been approved by the Government and it is now in discussion at the High Italian Chamber, the Senate. Many members have suggested amendments in favour of a more effective protection of the invention, as is obtained with the product patent.

The salient features of the Bill are: patents are to be granted to protect processes for the production of pharmaceuticals; when a compulsory licence is granted, the compensation must be fair and in keeping with the importance of the invention and the profit it is expected to yield, with the duration of the licence and all other aspects connected with its utilisation; and section 10 provides that a patentee "who refuses to accept the compensation as laid down may start proceedings before the court in Rome".

Coming to the Indian situation, I must first of all, heartily congratulate you on the results already achieved. In less than 20 years, your drug industry, operated by the State or by private enterprises, has certainly reached stage 3 and now is in the fringe of stage 4, that means the highest stage. Having in mind the high standing of Indian researchers, chemists, biologists and physicians, there is no doubt that concentrating your efforts mainly in the applied research and specially in the research of new processes for making drugs, you will acquire an increasing purchasing power through crossed licences with all the world. Your researches must be protected as the researches of all the world are protected.

Coming to the practical aspect of the problem, my opinion as an expert is in favour of the possibility of a new type of, may I say, combined patent i.e. a product patent associated

with one or more process patents, but with the provision that the inventor of a new process may have a licence from holder of the product patent. In such a way the system is very simple to assess and stimulus is given to new processes.

Mr. Chairman and Hon'ble Members, I am at the end of my exposition, and I must apologise for my bad English and for the length of my speech. I hope that my efforts to give you some technical data will be useful for you. In my experience as a Chief of the Italian Public Health in a difficult period, I learnt that laws relating to public health have always two sides, a political side and a technical side. A law drafted mainly by politicians will be a bad law, but worse will be the law drafted only by technicians. I repeat my appreciation for your unique approach to such a vital problem, hearing the views of experts of all the countries. I wish the best future for India's progress and prosperity, and please accept my hearty thanks.

Dr. L. M. Singhvi: Professor, I would like you to dilate particularly on the situation in respect of the quality control of drugs manufactured in your country without patent protection. Is it a fact that the quality of drugs is not uniformly guaranteed? It has been mentioned in some of the Memoranda before us that because there is the freedom of imitation, there is also freedom to manufacture sub-standard drugs. Is it a fact?

Prof. G. Bergami: The standard regulations on the manufacture of drugs stipulate that before you make a drug, you must have an authorisation to be operative in the field of drugs. In other words, you are inspected by an Inspector, who looks at your machinery etc. Naturally, after this authorisation the burden of responsibility lies on the producer. When it is sold in bulk, there is practically no control, because the control is limited to the processed product.

Dr. L. M. Singhvi: Would you please tell us whether during the period when patent protection was not available in Italy, it is a fact that there was no effort by the State also to control the prices? Whether any such effort was made or whether there was no such effort?

Prof. G. Bergami: In Italy, from the very beginning until now there has never been a patent law for drugs. All has been free. But control on quality and control on price of specialities has been operating from many many years.

Dr. L. M. Singhvi: It has been pointed out in the Memorandum submitted to us that the consumer has not gained even though there was freedom to copy any patents abroad. Now why was it so? Was it because the State did not operate effectively to control the prices or it was because the promotional cost inherent in the situation of the high proportion of cost, prevented the manufacturer, in Italy to sell these drugs at a reasonable price with only a reasonable margin of profit?

Prof. G. Bergami: If I have understood you well, you ask why in Italy when a copied product is put on the market, it has a price that is not low. Is that right? The price of the bulk is free price. There is no control of the State. There is the general law of economics, the law of the demand. But when you sell to the public a medical speciality, the price of final product of what is called registration, is based on analysed price. In other words, you must submit to the Health authorities, to the Economic Board, a memorandum where you say I have put so many Liras for the raw materials, so many for that and that, and the total cost is that. It happens for instance that one foreign firm has created a new product and is asking for registration in Italy; he will show the clinical investigation results etc. and finally the production cost of the product. He will document the price. He will document the price. He will say that he can sell at this price. A

new comer is not obliged to that, he may just have the same price although is paying anything. He will write to the Ministry saying I am also producing the same product, and will ask for the same price. Govt. has not the possibility to say you may sell at a lower price. The producer will say, I have the same right, I ask for the same price, because it is the same product, and practically happens that the copier makes a large profit, but also this profit is not so large, because there are so many. One will do, the other will do the same. In a short time, there will be 20 others. The market is always the same, but the market in this case is divided by 20. Each one may promote it to the physicians. In Italy we have 70 thousands physicians. You can imagine how costly it is to give samples to these physicians. Multiply it by 20 and you can see how much money is spent, with no use, and the cost is naturally higher. In the drug field, it is always better to concentrate production, to concentrate sales and promotion, otherwise you will have higher cost. Concentrate it at one place, the yield will be better.

Mr. Chairman: Does the competition tend to lower the prices?

Prof. G. Bergami: You must realise that in the pharmaceutical field the market is different. There is no relationship between the consumer and the producer. There is the intermediary, the physician. So really it is not the consumer that selects the product. The consumer goes to the physician; then it is the physician that selects. So happens, that if you sell a product at a lower price, you can spend less on advertisement and promotion. The public do not know whether the prices are lower, because the producer has spent practically less on the mechanism of promotion.

Dr. L. M. Singhvi: What is the place occupied by the foreign industry in the pharmaceutical industry in Italy? Whether there has been a

substantial inflow of foreign capital in Italy in this particular field?

Prof. G. Bergami: Well I beg your pardon, I am not an economic expert. Mr. Delgiudice will answer for me.

Mr. Chairman: He can answer.

Dr. G. Delgiudice: The only data we can give now....

Dr. L. M. Singhvi: You may supply it at a later date if it is not readily available with you because that will be more precise.

Shri R. P. Sinha: Broadly they can say now.

Shri R. Ramanathan Chettiar: The question is whether there is foreign investment in pharmaceutical industry in your country?

Dr. G. Delgiudice: There is foreign investment in the pharmaceutical industry. But this data we do not have. The only data we have now is that 21 per cent of the foreign investment in Italy is in the pharmaceutical industry. The exact figures of foreign investment in the pharmaceutical field will be supplied later.

Dr. L. M. Singhvi: We will appreciate if you will do that at a later date.

There is one more question, that is, about the new legislation of the 1st of July 1965 which has been drafted by various parties which are participating in the coalition Government of Italy. Would you tell us about the salutary features of this new legislation which was submitted on the 1st of July 1965 to the Senate of Italy?

Mr. Chairman: Can you send a copy of that Bill to us?

Prof. G. Bergami: I can give you the copy.

Mr. Chairman: Is it summary?

Prof. G. Bergami: It is English translation of the Law as drafted.

Dr. L. M. Singhvi: Would you commit on any aspect of this new legislation. You have said this concept has come out of years of thinking. I want to know what are those special provisions which are sought to be incorporated in this new legislation which you think would be particularly conducive to a proper growth and development of pharmaceutical industry in Italy and which has been lacking in the past or in the absence of patent or weak patent laws in your country.

Mr. Chairman: We will get it cyclostyled and distribute.

Dr. L. M. Singhvi: He is giving only the piece of legislation and I want the comments on the legislation.

Mr. Chairman: You please hand it over to us. I hope you have got no objection.

I am told that this Bill is before your Parliament for the last 10 years or 7 years. When do you propose to finalise it?

Prof. G. Bergami: I will explain the situation. We have had during the last ten years many different bills prepared by different Governments. Each time we took it up there was the difficulty of availability of time and in the meantime the Government fell and new Government came, and this happened many times and this is the last one and we hope the life of the Government will be so long that it will be passed. May I also say, that when we draft a Bill we draft it up roughly and there are many amendments during the discussions and it is difficult for me to formulate some comments on a draft which is a starting point. It has just started last week and they started feeling that certain point may be more profitable or not. A committee of Senators has been set up that will discuss it point by point making modifications. After

that the Law must go to the other Chamber and if it is not fully approved it must go back. I believe if everything goes right we will have this law next year, but my comments at this moment, at the starting point as it is, will not serve any purpose.

Shri Kashi Ram Gupta: I think there is a Patent law in Italy for cars, machinery, boilers and other products. Is there any such law there?

Prof. G. Bergami: Yes.

Shri Kashi Ram Gupta: What is the period of a patent allowed in that law?

Dr. G. Delgiudice: The normal period of a patent as in Germany, is about 15 years.

Shri Kashi Ram Gupta: From the date of application?

Dr. G. Delgiudice: Yes, from the date of application.

Shri Kashi Ram Gupta: You have got an agreement with U.S.S.R. regarding FIAT cars. Is it on the basis of royalty or sale of the know how there?

Prof. G. Bergami: Really the automobile industry is beyond my competence. I cannot comment, I am sorry.

Shri Kashi Ram Gupta: Do Italian firms and companies possess patents for drugs also in foreign countries?

Prof. G. Bergami: Yes, there are many cases in which an Italian manufacturer has got some patents in other countries.

Shri Kashi Ram Gupta: Which are the main countries where these patents have been approved?

Prof. G. Bergami: England, France, Belgium, South Africa, South America, North America, Trinidad and Germany etc.

Dr. C. B. Singh: You have got the unique experience of being a physiologist and a pharmacologist, and Public Health man as well. All these things put together, may I know from your experience what time does a drug take after being investigated in the laboratories to be brought into the market? I mean the average time and an average drug.

Prof. G. Bergami: My experience is that it depends mainly on the type of drug that you are experimenting. If you are dealing with a completely new entity, you must at least spend two years.

Dr. C. B. Singh: You think two years will be a reasonable period.

Prof. G. Bergami: It is an average period.

Dr. C. B. Singh: May I know what amount of money is being spent on research by your various firms of drugs or research in proportion to the total investment in this industry?

Prof. G. Bergami: I have no knowledge of that, because I know only about Public Health problems. He, Dr. Delgiudice knows the pharmaceutical industry.

Dr. C. B. Singh: Well, then, let us know about the pharmaceutical industry.

Dr. G. Delgiudice: 3 per cent on the turnover.

Dr. C. B. Singh: A big amount. I want to know whether it has been able to export large amounts of raw materials cheaply to this country because they were not patented in Italy. The question is, because there is no patent for pharmaceutical drugs in Italy, was it possible for those firms to complete more favourably with the world market and export those raw materials cheaply to this country.

Dr. G. Delgiudice: No. We Assofarma, do not do so.

Dr. C. B. Singh: Are you sure about it?

Dr. G. Delgiudice: Yes.

Shri P. Venkatasubbaiah: In the absence of a patent law in Italy, and also because of the foreign capitalists taking advantage and flooding the Italian market in respect of the pharmaceutical products, and also owing to the lack of research possibilities of knowing the quality of each product that is being sent to your country, may I know whether the Government is contemplating any research or control so as to check any spurious drugs coming to your country and to have control over the quality?

Prof. G. Bergami: If, you speak of speciality, there is a strict control at the moment of approval, and also during the stage of sale, because some samples are taken from the market for a severe composition analysing, and the product which is not well made is put out of the market. When we are speaking of the raw material, I was saying that there was no control on that, because we do not need contro' on the raw material, since we control the finished product. From the point of view of the consumer, what is more important is the finished product. There is a very strict control of quality in respect of the finished product in Italy.

Shri P. K. Kumaran: In your memorandum you have quoted the example where a particular tranquilliser has been produced with 18 imitations, and you have drawn the conclusion that in spite of several imitations produced in Italy, it did not enable the Italian consumer to get the drug at a cheaper rate. When the British Government started the National Health Service, they found that the drugs which they wanted were so costly in the indigenous market, that they decided to import certain drugs from Ita'y and they got it at a cheaper rate with the result that they later were able to force their medical

local manufacturers, to come to some sort of voluntary price regulation scheme. That is the Italian consumer did not get the benefit of the price reduction due to the absence of the patent law, but the British consumer benefited.

Prof. G. Bergami: This is the key problem of this problem of patents. We must recognise one simple fact: when I write a book, I will have the right to have a percentage of the fixed a price for such copy of that book. If somebody will reprint that book without paying me the copy right, he will have a lower cost and may sell it at a lower price. The same happens for the drugs. If some body reproduce a drug, he can sell it at a lower price. But in the case of Italy, if one enterprise has been able to copy, and sometimes they took the knowhow by not so clear channels, he gains selling the specialities at high prices, and then used the bulk sales at any price, for lowering the general expenses. So, they make the best profit on the finished product which they sell at a high price like the original inventor. In England, I do not know whether they have been successful or not with this method. But I believe that all cases like that will not be repeated easily in future, especially in regards to many important drugs such as chloroamphenicol and other antibiotics whose patent are expiring. We must be careful in planning for the future. We need the best new drugs at the lower cost, because it will be always useful if we facilitate that. In the new discoveries that are made, if we do not have the right price, or if we do not protect the price, of research it is not possib'e to make headway. We must see that the spirit of research is maintained and honoured.

Shri A. T. Sarma: I want to know whether you consider that this Bill, if enacted, will be an improvement and would improve the research and development of industrial activity in India.

Prof. G. Bergami: If I may be frank with you, I must say that especially on the provision of licence of rights, the patent will annihilated on this will be against the interests of discovery. When one patent is available to everybody, nobody starts because he is afraid of the others. Not because of lack of interest, I do not believe that. Frankly, I do not believe your Patent Bill relating to the pharmaceutical industry will enhance research. You have reached a very high standard in research and you have a very large capability; I do not see why you should not act like other countries that have already developed.

Mr. Chairman: Do you know that the patent law in almost every country has got this licence of rights. Out of 74 countries, 60 have got it.

Prof. G. Bergami: I am not an expert on this legal matter.

Shri Dalpat Singh: You have said in your statement that absence of patent does not make any difference, does not lower the price of the drug. Do you think by giving patents, the price will come down or will it remain unchanged?

Prof. G. Bergami: My feeling is that the cost of the utilisation of the patent normally realised through royalties is so low in comparison with the promotion costs of any medicine that it does not affect the price practically. The price of medicine today all over the world is mainly composed of promotion costs, and the cost of the royalty is very little. This is demonstrated by the fact that the price in France is sometimes lower than in Italy for the same drug although France has the patent and we do not have the patent. This is an economical result that everybody can check. The same is the case in England. In many cases the prices in England are lower than in Italy. This gives me the feeling that prices are a different problem from patent. There is only a small connection.

Shri Arjun Arora: How do prices of drugs in Italy compare with those in other European countries where patents exist?

Prof. G. Bergami: From memory I can say that the cheaper countries in Europe are France and England. Then come Switzerland, which is like Italy. Then comes Germany where prices are a little higher. So, we believe that the only country which has no patents is in the middle of this price line.

Shri R. P. Sinha: It has been represented to us by various witnesses that the inflow of foreign capital and technology to India will not be forthcoming if we weaken the patent law of this country. You have just stated that 21 per cent of the total foreign investment in Italy is in the pharmaceutical industry where there is no patent. Would you throw some light as to how the foreign capital is flowing into Italy in spite of the fact that there is no protection for these products?

Prof. G. Bergami: The lack of patent obliges the foreign producers to go direct to the market as they have to defend their product against competitors directly because they have to defend their product against competitors directly because they have no defence from the patent. Coming back to the problem of India, my opinion is this. If I am alone, I can calculate the real cost, as I will be able to sell so many tonnes or quintals. Otherwise, how can I make any pre-emption?

Mr. Chairman: By enacting a patent law, you want to prevent or increase the flow of foreign capital?

Prof. G. Bergami: The policy of the Italian Government until now has been to give freedom to the economy and the best results have been obtained.

Shri R. P. Sinha: Are the foreign investors in pharmaceutical industry

in Italy getting good returns in spite of there being no patent law there?

Prof. G. Bergami: The profit normally made by holders of patents is made by heavy promotion by foreign companies operating in Italy. Sales are related to promotion and through promotion profits are made.

Shri R. P. Sinha: We are told that the pharmaceutical industry will not be able to bear the cost of research without patent protection. You are spending in Italy 3 per cent of your turnover on research work in spite of the fact that there is no patent law there. How do you recover this expenditure on research?

Prof. G. Bergami: This small percentage spent in Italy in research is not spent by the thousand enterprises, but only by a few. A few enterprises spent at least 10 per cent or even more on research, because their progress depends on research. The researches do not pay immediately but they pay in the long run.

Shri Bade: How much foreign exchange is remitted every year by foreign firms in Italy in the shape of dividends, royalties and for technical know-how?

Dr. G. Delgiudice: Italy pays towards royalties and technical know-how to foreign companies about 45 billion liras. Italy does not get more than 2-3 billions of liras for their patents on drugs although receive many billions for other things like polymers, etc.

Shri Bade: You have got no patent bill till now. We have our patent law from 1911. Still, the Glaxo Company which is manufacturing about 153 pharmaceutical things under their own registered proprietary trade names and which is holding a number of patents in India, is manufacturing only 2 medicines here and all the other medicines are being imported from outside, because they have got patents in India. Thus they

are exploiting the poor people. In the light of this experience of ours, how do you say that patent law will be conducive to the investment of foreign firms? Instead of manufacturing medicines here, they import them from outside. The patent law is misused.

Prof. G. Bergami: If there is a product that can be imported at a lower cost, it is no use for a country to produce that locally at a higher cost. It will be a big mistake. This was a mistake that Mussolini did and we paid very very badly for that mistake. In Italy we started the production of some vitamins, but we stopped when we saw that our production cost was many times the production cost of Roche who specialised in the production of vitamins. This happens often in the pharmaceutical field. The emphasis is on the minimum cost. That which is economical should be adopted. There are special cases, due to special needs or due to the existence of raw materials in a country, where it may be necessary to resort to local production. But I must say this is a mirage of local production. The local production should be economically convenient and then only it should be resorted. What is important is to have the lowest price and the lowest cost. This is very important for the economy of the country.

Shri Bade: Shall we come to the conclusion by this discussion, that our provision for compulsory licence is the only remedy for such foreign companies who are not investing money in India?

Prof. G. Bergami: I agree.

Shri V. M. Chordia: May I know whether it is not a fact that in the absence of any patent law in Italy, in the first stage the Italians could learn to imitate the products of others, in the second stage they could improve upon those products and in the third stage they could introduce new products, and by this they could save their money from being sent out of the country?

Prof. G. Bergami: The production of drugs change every year. The production of drugs today is not what it was 20 or 30 years ago. In Italy the industrialists are paying substantial sums for patent rights. The yearly cost paid in Italy for licences in the pharmaceutical field is about 45 billion liras.

Shri V. M. Chordia: Is it not a fact that even if you have a patent law for having foreign know-how you will have to pay the same amount as you are paying at present, but in addition to that you will have to pay for years more price than what you would have paid had there been producers in Italy and if there had been no patent law?

Prof. G. Bergami: If there is a patent law we will pay practically the same amount, there will be no difference at all. Only when it is economically convenient an Italian industrialist will start production; otherwise they will import. The burden to establish whether it is convenient or not should be on the private enterprise. If the State is to decide that, we will be exposed to a lot of complications. I have personal experience of that when I was High Commissioner for Public Health. This was the period when penicillin was very scarce and developed only in the USA. We obtained from U.N.N.R.A. one plant to make penicillin. It was set up as a State enterprise. The plant was very old, it was modified and finally we started production. But the price was about two times more than the price of free enterprise. Finally we stopped production. The State is not aware of the real condition of the market and it takes too long to take a decision. So local production should be done only when it is economically convenient. Economical convenience may have a different origin—it may be cost, it may be existing facilities, it may be the availability of raw materials in the country.

Shri Wasnik: You have stated that the provision in the Indian Patent Bill for compulsory licence has negated the patent protection. I understand that in the Italian Patent Bill that is before the Italian Parliament there is a similar provision in clause 8. How do you justify that?

Prof. G. Bergami: First of all, I must say that I am not the man who has prepared the law. We may have a different opinion. I must clarify that compulsory licence is completely different from licensing of rights. They are two different things. Italian law provides compulsory licence. According to that, compulsory licence is going to be given to reduce the bad effects of patents.

Shri R. Ramanathan Chettiar: You stated earlier that 21 per cent of the foreign investment in Italy is in the pharmaceutical industry. I do not know whether you have the figures with you. Earlier you said that 45 billion liras or something is invested. Is it 21 per cent of that or 21 per cent of foreign investment in Italy?

Dr. G. Delgiudice: This figure we do not have.

Shri R. Ramanathan Chettiar: There are certain American combines or cartels operating in Europe, like the American Cynamide Company, which have bought over some of the Italian companies. Are there any instances where an American pharmaceutical combine has purchased any Italian pharmaceutical industry and established itself in Italy?

Dr. G. Delgiudice: There are cases where they have majority shareholding in Italian companies, but these are few.

Shri R. Ramanathan Chettiar: For example, the Minnesota Mining Manufacturing Company has recently purchased two companies—one in France, La Bauchet, and the other one is Ferrania.

ceutical market, of new products elsewhere patented, generally sold at a very low price because the producers have no research cost to charge, and because their profit was mainly based on the sales of the related speciality and the bulk sales being mainly directed to permit a substantial industrial production in order to reduce the general expenses.

In both cases there was no economic advantage at all to the Italian consumer, because, in order to meet the larger promotional expenses, due to the great number of competitors for the same product, prices have been maintained in an order of magnitude of the original product, comprising the research cost, and the low price of the product in bulk has been utilised only for some export business where and when no patent protection was enforced. I have given in my memorandum one specific example to substantiate this.

It is thus clear that as yet, lack of patent protection has not been of any advantage to the Italian consumer because the savings of possible licence payments are counteracted and even exceeded by the larger advertisement costs necessary to establish one's own product in a market among about twenty like products.

In fact as could not otherwise be expected, this excess of competing products, which practically have the same price as the original product and thus do not exert a price-fixing effect, has resulted in an enormous wastage of free samples and increase in advertisement costs. This has made expensive both to launch a new product and to keep the doctor aware of the products already established, in order to prevent replacing them by others almost identical in price and composition.

In conclusion the Italian experience demonstrates that, whereas the lack of patents in the drug field has not had the effect of lower prices for the consumer, in the meantime has been

an hindrance for the few important Italian drug manufacturers.

As a matter of fact only small or medium-sized producers have entered the market with copies of patented drugs, starting the production only when from the clinical investigation results published by the original producer, or from the preliminary sales in the country of origin, potential market in Italy was foreseeable, capable of paying the cost of a small-sized production sold at the same price as of the original producer, taking in this way undue advantage of the absence of research cost.

Objectively we must recognize that the lack of patents has had a negative effect on the best part of the Italian pharmaceutical industry, burdened with the increasing cost of research, and obliged to fight with competitors copying freely the best products originated by others.

In conclusion our experience has clearly demonstrated that the lack of drugs patents has badly influenced the development of our best pharmaceutical industry, when compared with the very good results obtained in Italy in other branches of the chemical industry protected by product and process patents. If we look at the good achievements of the Italian chemists in other fields, we have very excellent results and a large number of patents. The only exception of the pharmaceutical industry.

It will be convenient to examine at this point the future trend in the pharmaceutical industry. As you certainly know a tremendous amount of money is yearly invested in drug research in all the industrialised countries. This heavy investment, increasing every year is required because the pharmaceutical research is completely different from all other types of industrial research. If for instance we consider an automobile factory, the management can easily make

research programme for a new type of engine. The technicians will do their best; the result may be more or less successful, but in any case the research department will be able to give the management a new engine. In the case of the drug industry the picture is completely different. The management may ask the research department to find a new remedy for hypertension, but nobody can assure that a positive result will be achieved. We can give any quantity of money; we can enlarge the laboratory, asking for a remedy for cancer, but nobody can forecast the results. What we know is that on an average only one product out of 3000 or 4000 new products shows promising activity as a new drug and when we say promising activity we say that we have in hand not a product but only a probability of success.

And now we can forecast that in the next decade, very few new products will enter the market at a tremendous cost of chemical, biological and clinical investigation. This means that new products will certainly be charged of substantial amount of cost of research, that should be paid by the State or by the industry.

We must therefore make our choice State research or private research. I must recognise that I am not fully confident in the efficiency of State research in the pharmaceutical field. My opinion is absolutely not based on political reasons, but on the observation of the very important results obtained during the last 20 years by the Soviet Union in all fields with the only exception in the field of drugs. I have the best consideration for the high scientific standing of my Russian colleagues in all fields and I know also that the drug research is very active. Therefore, the explanation should be found in the peculiarity of the new drug research, requiring the largest possible freedom individual freedom, of research. Let me give you one example. It happened many years ago that an American company—I remember it is the

Lilly Company—received from a tropical country a flower plant called *Vinca Rosca*, which was locally used for treatment of diabetes. They tried to extract the active principle of the plant, but they found that there was no effect at all on the blood glucose or on diabetes. In the meantime, one researcher found that after the injection of the drug into a rabbit, the leucocyte (white blood cells) diminished. So it was discovered that the drug had the effect of reducing the number of leucocytes (white blood cells) and was later utilised for treatment of Hodgkins disease or leukemia. This result of research was due to a very large amount of freedom. This is why State research is not good because this kind of freedom is not there. It may reduce the number of new inventions. So we should give a large amount of freedom in research.

Personally, I am in favour of the co-existence of a State research, mainly basic research, with a private research, mainly applied, stimulated by an efficient patent system. Our experience in Italy has demonstrated to us that the problem of prices of drug is practically independent from the problem of patent. Prices to the public in Italy are of the same order of prices in countries having the patent—like France, England and Switzerland—and, what is more impressive, the prices of the biggest Italian producers who pay voluntary royalties to the foreign inventors are the same as the smaller producers who pay nothing at all. We have also noticed that multiplication of producers in the drug market increases the price because of the higher cost of promotion and the low yield of the small production unit, inferior to the critical production mass peculiar to each product. For all these reasons, Italy is now changing its drug patent policy.

It may be of some interest to you to note the fact that the Italian Government is preparing a five-year economic development plan and recognising the importance of the re-

search in the sanitary field, has clearly indicated in section 6 of the official plan that the pharmaceutical research will be mainly stimulated adopting the patent protection for the production of drugs. A Bill, introducing the process patent, has already been approved by the Government and it is now in discussion at the High Italian Chamber, the Senate. Many members have suggested amendments in favour of a more effective protection of the invention, as is obtained with the product patent.

The salient features of the Bill are: patents are to be granted to protect processes for the production of pharmaceuticals; when a compulsory licence is granted, the compensation must be fair and in keeping with the importance of the invention and the profit it is expected to yield, with the duration of the licence and all other aspects connected with its utilisation; and section 10 provides that a patentee "who refuses to accept the compensation as laid down may start proceedings before the court in Rome".

Coming to the Indian situation, I must first of all, heartily congratulate you on the results already achieved. In less than 20 years, your drug industry, operated by the State or by private enterprises, has certainly reached stage 3 and now is in the fringe of stage 4, that means the highest stage. Having in mind the high standing of Indian researchers, chemists, biologists and physicians, there is no doubt that concentrating your efforts mainly in the applied research and specially in the research of new processes for making drugs, you will acquire an increasing purchasing power through crossed licences with all the world. Your researches must be protected as the researches of all the world are protected.

Coming to the practical aspect of the problem, my opinion as an expert is in favour of the possibility of a new type of, may I say, combined patent i.e. a product patent associated

with one or more process patents, but with the provision that the inventor of a new process may have a licence from holder of the product patent. In such a way the system is very simple to assess and stimulus is given to new processes.

Mr. Chairman and Hon'ble Members, I am at the end of my exposition, and I must apologise for my bad English and for the length of my speech. I hope that my efforts to give you some technical data will be useful for you. In my experience as a Chief of the Italian Public Health in a difficult period, I learnt that laws relating to public health have always two sides, a political side and a technical side. A law drafted mainly by politicians will be a bad law, but worse will be the law drafted only by technicians. I repeat my appreciation for your unique approach to such a vital problem, hearing the views of experts of all the countries. I wish the best future for India's progress and prosperity, and please accept my hearty thanks.

Dr. L. M. Singhvi: Professor, I would like you to dilate particularly on the situation in respect of the quality control of drugs manufactured in your country without patent protection. Is it a fact that the quality of drugs is not uniformly guaranteed? It has been mentioned in some of the Memoranda before us that because there is the freedom of imitation, there is also freedom to manufacture sub-standard drugs. Is it a fact?

Prof. G. Bergami: The standard regulations on the manufacture of drugs stipulate that before you make a drug, you must have an authorisation to be operative in the field of drugs. In other words, you are inspected by an Inspector, who looks at your machinery etc. Naturally, after this authorisation the burden of responsibility lies on the producer. When it is sold in bulk, there is practically no control, because the control is limited to the processed product.

Dr. L. M. Singhvi: Would you please tell us whether during the period when patent protection was not available in Italy, it is a fact that there was no effort by the State also to control the prices? Whether any such effort was made or whether there was no such effort?

Prof. G. Bergami: In Italy, from the very beginning until now there has never been a patent law for drugs. All has been free. But control on quality and control on price of specialities has been operating from many many years.

Dr. L. M. Singhvi: It has been pointed out in the Memorandum submitted to us that the consumer has not gained even though there was freedom to copy any patents abroad. Now why was it so? Was it because the State did not operate effectively to control the prices or it was because the promotional cost inherent in the situation of the high proportion of cost, prevented the manufacturers in Italy to sell these drugs at a reasonable price with only a reasonable margin of profit?

Prof. G. Bergami: If I have understood you well, you ask why in Italy when a copied product is put on the market, it has a price that is not low. Is that right? The price of the bulk is free price. There is no control of the State. There is the general law of economics, the law of the demand. But when you sell to the public a medical speciality, the price of final product of what is called registration, is based on analysed price. In other words you must submit to the Health authorities, to the Economic Board, a memorandum where you say I have put so many Liras for the raw materials, so many for that and that, and the total cost is that. It happens for instance that one foreign firm has created a new product and is asking for registration in Italy; he will show the clinical investigation results etc. and finally the production cost of the product. He will document the price. He will say that he can sell at this price. A

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new comer is not obliged to that, he may just have the same price although is paying anything. He will write to the Ministry saying I am also producing the same product, and will ask for the same price. Govt. has not the possibility to say you may sell at a lower price. The producer will say, I have the same right, I ask for the same price, because it is the same product, and practically happens that the copier makes a large profit, but also this profit is not so large, because there are so many. One will do, the other will do the same. In a short time, there will be 20 others. The market is always the same, but the market in this case is divided by 20. Each one may promote it to the physicians. In Italy we have 70 thousands physicians. You can imagine how costly it is to give samples to these physicians. Multiply it by 20 and you can see how much money is spent, with no use, and the cost is naturally higher. In the drug field, it is always better to concentrate production, to concentrate sales and promotion, otherwise you will have higher cost. Concentrate it at one place, the yield will be better.

Mr. Chairman: Does the competition tend to lower the prices?

Prof. G. Bergami: You must realise that in the pharmaceutical field the market is different. There is no relationship between the consumer and the producer. There is the intermediary, the physician. So really it is not the consumer that selects the product. The consumer goes to the physician; then it is the physician that selects. So happens, that if you sell a product at a lower price, you can spend less on advertisement and promotion. The public do not know whether the prices are lower, because the producer has spent practically less on the mechanism of promotion.

Dr. L. M. Singhvi: What is the place occupied by the foreign industry in the pharmaceutical industry in Italy? Whether there has been a

substantial inflow of foreign capital in Italy in this particular field?

Prof. G. Bergami: Well I beg your pardon, I am not an economic expert. Mr. Delgiudice will answer for me.

Mr. Chairman: He can answer.

Dr. G. Delgiudice: The only data we can give now....

Dr. L. M. Singhvi: You may supply it at a later date if it is not readily available with you because that will be more precise.

Shri R. P. Sinha: Broadly they can say now.

Shri R. Ramanathan Chettiar: The question is whether there is foreign investment in pharmaceutical industry in your country?

Dr. G. Delgiudice: There is foreign investment in the pharmaceutical industry. But this data we do not have. The only data we have now is that 21 per cent of the foreign investment in Italy is in the pharmaceutical industry. The exact figures of foreign investment in the pharmaceutical field will be supplied later.

Dr. L. M. Singhvi: We will appreciate if you will do that at a later date.

There is one more question, that is, about the new legislation of the 1st of July 1965 which has been drafted by various parties which are participating in the coalition Government of Italy. Would you tell us about the salutary features of this new legislation which was submitted on the 1st of July 1965 to the Senate of Italy?

Mr. Chairman: Can you send a copy of that Bill to us?

Prof. G. Bergami: I can give you the copy.

Mr. Chairman: Is it summary?

Prof. G. Bergami: It is English translation of the Law as drafted.

Dr. L. M. Singhvi: Would you commit on any aspect of this new legislation. You have said this concept has come out of years of thinking. I want to know what are those special provisions which are sought to be incorporated in this new legislation which you think would be particularly conducive to a proper growth and development of pharmaceutical industry in Italy and which has been lacking in the past or in the absence of patent or weak patent laws in your country.

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Dr. G. Delgiudice: The normal period of a patent as in Germany, is about 15 years.

Shri Kashi Ram Gupta: From the date of application?

Dr. G. Delgiudice: Yes, from the date of application.

Shri Kashi Ram Gupta: You have got an agreement with U.S.S.R. regarding FIAT cars. Is it on the basis of royalty or sale of the know how there?

Prof. G. Bergami: Really the automobile industry is beyond my competence. I cannot comment, I am sorry.

Shri Kashi Ram Gupta: Do Italian firms and companies possess patents for drugs also in foreign countries?

Prof. G. Bergami: Yes, there are many cases in which an Italian manufacturer has got some patents in other countries.

Shri Kashi Ram Gupta: Which are the main countries where these patents have been approved?

Prof. G. Bergami: England, France, Belgium, South Africa, South America, North America, Trinidad and Germany etc.

Dr. C. B. Singh: You have got the unique experience of being a physiologist and a pharmacologist, and Public Health man as well. All these things put together, may I know from your experience what time does a drug take after being investigated in the laboratories to be brought into the market? I mean the average time and an average drug.

Prof. G. Bergami: My experience is that it depends mainly on the type of drug that you are experimenting. If you are dealing with a completely new entity, you must at least spend two years.

Dr. C. B. Singh: You think two years will be a reasonable period.

Prof. G. Bergami: It is an average period.

Dr. C. B. Singh: May I know what amount of money is being spent on research by your various firms of drugs or research in proportion to the total investment in this industry?

Prof. G. Bergami: I have no knowledge of that, because I know only about Public Health problems. He, Dr. Delgiudice knows the pharmaceutical industry.

Dr. C. B. Singh: Well, then, let us know about the pharmaceutical industry.

Dr. G. Delgiudice: 3 per cent on the turnover.

Dr. C. B. Singh: A big amount. I want to know whether it has been able to export large amounts of raw materials cheaply to this country because they were not patented in Italy. The question is, because there is no patent for pharmaceutical drugs in Italy, was it possible for those firms to complete more favourably with the world market and export those raw materials cheaply to this country.

Dr. G. Delgiudice: No. We Assofarma, do not do so.

Dr. C. B. Singh: Are you sure about it?

Dr. G. Delgiudice: Yes.

Shri P. Venkatasubbaiah: In the absence of a patent law in Italy, and also because of the foreign capitalists taking advantage and flooding the Italian market in respect of the pharmaceutical products, and also owing to the lack of research possibilities of knowing the quality of each product that is being sent to your country, may I know whether the Government is contemplating any research or control so as to check any spurious drugs coming to your country and to have control over the quality?

Prof. G. Bergami: If, you speak of speciality, there is a strict control at the moment of approval, and also during the stage of sale, because some samples are taken from the market for a severe composition analysing, and the product which is not well made is put out of the market. When we are speaking of the raw material, I was saying that there was no control on that, because we do not need contro' on the raw material, since we control the finished product. From the point of view of the consumer, what is more important is the finished product. There is a very strict control of quality in respect of the finished product in Italy.

Shri P. K. Kumaran: In your memorandum you have quoted the example where a particular tranquilliser has been produced with 18 imitations, and you have drawn the conclusion that in spite of several imitations produced in Italy, it did not enable the Italian consumer to get the drug at a cheaper rate. When the British Government started the National Health Service, they found that the drugs which they wanted were so costly in the indigenous market, that they decided to import certain drugs from Ita'y and they got it at a cheaper rate with the result that they later were able to force their medical

local manufacturers, to come to some sort of voluntary price regulation scheme. That is the Italian consumer did not get the benefit of the price reduction due to the absence of the patent law, but the British consumer benefited.

Prof. G. Bergami: This is the key problem of this problem of patents. We must recognise one simple fact: when I write a book, I will have the right to have a percentage of the fixed a price for such copy of that book. If somebody will reprint that book without paying me the copy right, he will have a lower cost and may sell it at a lower price. The same happens for the drugs. If some body reproduce a drug, he can sell it at a lower price. But in the case of Italy, if one enterprise has been able to copy, and sometimes they took the knowhow by not so clear channels, he gains selling the specialities at high prices, and then used the bulk sales at any price, for lowering the general expenses. So, they make the best profit on the finished product which they sell at a high price like the original inventor. In England, I do not know whether they have been successful or not with this method. But I believe that all cases like that will not be repeated easily in future, especially in regards to many important drugs such as chloroamphenicol and other antibiotics whose patent are expiring. We must be careful in planning for the future. We need the best new drugs at the lower cost, because it will be always useful if we facilitate that. In the new discoveries that are made, if we do not have the right price, or if we do not protect the price, of research it is not possible to make headway. We must see that the spirit of research is maintained and honoured.

Shri A. T. Sarma: I want to know whether you consider that this Bill, if enacted, will be an improvement and would improve the research and development of industrial activity in India.

Prof. G. Bergami: If I may be frank with you, I must say that especially on the provision of licence of rights, the patent will annihilated on this will be against the interests of discovery. When one patent is available to everybody, nobody starts because he is afraid of the others. Not because of lack of interest, I do not believe that. Frankly, I do not believe your Patent Bill relating to the pharmaceutical industry will enhance research. You have reached a very high standard in research and you have a very large capability; I do not see why you should not act like other countries that have already developed.

Mr. Chairman: Do you know that the patent law in almost every country has got this licence of rights. Out of 74 countries, 60 have got it.

Prof. G. Bergami: I am not an expert on this legal matter.

Shri Dalpat Singh: You have said in your statement that absence of patent does not make any difference, does not lower the price of the drug. Do you think by giving patents, the price will come down or will it remain unchanged?

Prof. G. Bergami: My feeling is that the cost of the utilisation of the patent normally realised through royalties is so low in comparison with the promotion costs of any medicine that it does not affect the price practically. The price of medicine today all over the world is mainly composed of promotion costs, and the cost of the royalty is very little. This is demonstrated by the fact that the price in France is sometimes lower than in Italy for the same drug although France has the patent and we do not have the patent. This is an economical result that everybody can check. The same is the case in England. In many cases the prices in England are lower than in Italy. This gives me the feeling that prices are a different problem from patent. There is only a small connection.

Shri Arjun Arora: How do prices of drugs in Italy compare with those in other European countries where patents exist?

Prof. G. Bergami: From memory I can say that the cheaper countries in Europe are France and England. Then come Switzerland, which is like Italy. Then comes Germany where prices are a little higher. So, we believe that the only country which has no patents is in the middle of this price line.

Shri R. P. Sinha: It has been represented to us by various witnesses that the inflow of foreign capital and technology to India will not be forthcoming if we weaken the patent law of this country. You have just stated that 21 per cent of the total foreign investment in Italy is in the pharmaceutical industry where there is no patent. Would you throw some light as to how the foreign capital is flowing into Italy in spite of the fact that there is no protection for these products?

Prof. G. Bergami: The lack of patent obliges the foreign producers to go direct to the market as they have to defend their product against competitors directly because they have to defend their product against competitors directly because they have no defence from the patent. Coming back to the problem of India, my opinion is this. If I am alone, I can calculate the real cost, as I will be able to sell so many tonnes or quintals. Otherwise, how can I make any presumption?

Mr. Chairman: By enacting a patent law, you want to prevent or increase the flow of foreign capital?

Prof. G. Bergami: The policy of the Italian Government until now has been to give freedom to the economy and the best results have been obtained.

Shri R. P. Sinha: Are the foreign investors in pharmaceutical industry

in Italy getting good returns in spite of there being no patent law there?

Prof. G. Bergami: The profit normally made by holders of patents is made by heavy promotion by foreign companies operating in Italy. Sales are related to promotion and through promotion profits are made.

Shri R. P. Sinha: We are told that the pharmaceutical industry will not be able to bear the cost of research without patent protection. You are spending in Italy 3 per cent of your turnover on research work in spite of the fact that there is no patent law there. How do you recover this expenditure on research?

Prof. G. Bergami: This small percentage spent in Italy in research is not spent by the thousand enterprises, but only by a few. A few enterprises spent at least 10 per cent or even more on research, because their progress depends on research. The researches do not pay immediately but they pay in the long run.

Shri Bade: How much foreign exchange is remitted every year by foreign firms in Italy in the shape of dividends, royalties and for technical know-how?

Dr. G. Delgiudice: Italy pays towards royalties and technical know-how to foreign companies about 45 billion liras. Italy does not get more than 2-3 billions of liras for their patents on drugs although receive many billions for other things like polymers, etc.

Shri Bade: You have got no patent bill till now. We have our patent law from 1911. Still, the Glaxo Company which is manufacturing about 153 pharmaceutical things under their own registered proprietary trade names and which is holding a number of patents in India, is manufacturing only 2 medicines here and all the other medicines are being imported from outside, because they have got patents in India. Thus they

are exploiting the poor people. In the light of this experience of ours, how do you say that patent law will be conducive to the investment of foreign firms? Instead of manufacturing medicines here, they import them from outside. The patent law is misused.

Prof. G. Bergami: If there is a product that can be imported at a lower cost, it is no use for a country to produce that locally at a higher cost. It will be a big mistake. This was a mistake that Mussolini did and we paid very very badly for that mistake. In Italy we started the production of some vitamins, but we stopped when we saw that our production cost was many times the production cost of Roche who specialised in the production of vitamins. This happens often in the pharmaceutical field. The emphasis is on the minimum cost. That which is economical should be adopted. There are special cases, due to special needs or due to the existence of raw materials in a country, where it may be necessary to resort to local production. But I must say this is a mirage of local production. The local production should be economically convenient and then only it should be resorted. What is important is to have the lowest price and the lowest cost. This is very important for the economy of the country.

Shri Bade: Shall we come to the conclusion by this discussion, that our provision for compulsory licence is the only remedy for such foreign companies who are not investing money in India?

Prof. G. Bergami: I agree.

Shri V. M. Chordia: May I know whether it is not a fact that in the absence of any patent law in Italy, in the first stage the Italians could learn to imitate the products of others, in the second stage they could improve upon those products and in the third stage they could introduce new products, and by this they could save their money from being sent out of the country?

Prof. G. Bergami: The production of drugs change every year. The production of drugs today is not what it was 20 or 30 years ago. In Italy the industrialists are paying substantial sums for patent rights. The yearly cost paid in Italy for licences in the pharmaceutical field is about 45 billion liras.

Shri V. M. Chordia: Is it not a fact that even if you have a patent law for having foreign know-how you will have to pay the same amount as you are paying at present, but in addition to that you will have to pay for years more price than what you would have paid had there been producers in Italy and if there had been no patent law?

Prof. G. Bergami: If there is a patent law we will pay practically the same amount, there will be no difference at all. Only when it is economically convenient an Italian industrialist will start production; otherwise they will import. The burden to establish whether it is convenient or not should be on the private enterprise. If the State is to decide that, we will be exposed to a lot of complications. I have personal experience of that when I was High Commissioner for Public Health. This was the period when penicillin was very scarce and developed only in the USA. We obtained from U.N.N.R.A. one plant to make penicillin. It was set up as a State enterprise. The plant was very old, it was modified and finally we started production. But the price was about two times more than the price of free enterprise. Finally we stopped production. The State is not aware of the real condition of the market and it takes too long to take a decision. So local production should be done only when it is economically convenient. Economical convenience may have a different origin—it may be cost, it may be existing facilities, it may be the availability of raw materials in the country.

Shri Wasnik: You have stated that the provision in the Indian Patent Bill for compulsory licence has negated the patent protection. I understand that in the Italian Patent Bill that is before the Italian Parliament there is a similar provision in clause 8. How do you justify that?

Prof. G. Bergami: First of all, I must say that I am not the man who has prepared the law. We may have a different opinion. I must clarify that compulsory licence is completely different from licensing of rights. They are two different things. Italian law provides compulsory licence. According to that, compulsory licence is going to be given to reduce the bad effects of patents.

Shri R. Ramanathan Chettiar: You stated earlier that 21 per cent of the foreign investment in Italy is in the pharmaceutical industry. I do not know whether you have the figures with you. Earlier you said that 45 billion liras or something is invested. Is it 21 per cent of that or 21 per cent of foreign investment in Italy?

Dr. G. Delgiudice: This figure we do not have.

Shri R. Ramanathan Chettiar: There are certain American combines or cartels operating in Europe, like the American Cynamide Company, which have bought over some of the Italian companies. Are there any instances where an American pharmaceutical combine has purchased any Italian pharmaceutical industry and established itself in Italy?

Dr. G. Delgiudice: There are cases where they have majority shareholding in Italian companies, but these are few.

Shri R. Ramanathan Chettiar: For example, the Minnesota Mining Manufacturing Company has recently purchased two companies—one in France, La Bauchet, and the other one is Ferrania.

Dr. G. Delgiudice: It is not a pharmaceutical company.

Shri R. Ramanathan Chettiar: La Bauchet is collaborating with an Indian company in putting up a photo film plant in the Nilgiris and Ferrania is also interested in photo film industry. Like that there are instances even in regard to the pharmaceutical industry where they have purchased a few companies, like the American Cynamide Company case.

Dr. G. Delgiudice: There is the Lederle company in Italy which is American Cynamide Company. There is Pfizer in Italy and also Squibb as they are in India. They have come and invested their money there.

Shri R. Ramanathan Chettiar: Am I right in thinking that you have no anti-Trust law, like the Sherman law, on the American model to prevent foreign investment in any industry?

Dr. G. Delgiudice: Till now there was no such law in Italy but an anti-trust law is under preparation, and is under the Cabinet consideration.

Mr. Chairman: Thank you very much, gentlemen.

(The witnesses then withdrew.)

(The Committee then adjourned to meet again at 15.00 hours.)

II. Federation of Economic Organizations of Japan, Japan Pharmaceutical Manufacturers' Association and Japan Pharmaceutical, Medical and Dental Supply Exporters' Association Japan Patent Association, Tokyo.

Spokesmen:

(1) Mr. Shoichi Inouye.

(2) Mr. Shoji Matsui, Patent Attorney.

(The witnesses were called and they took their seats.)

Mr. Chairman: Gentlemen, the evidence that you give will be printed and distributed to all Members of

Parliament and Members of the Committee and will be laid on the Table of the House. Even if you want any portion to be treated as confidential, it will be printed and distributed to all the Members of Parliament.

We have received your memorandum and it has been distributed to all the Members. If you want to stress any point or make out any new points, you may kindly do so after which Members will put questions to you.

Mr. Shoichi Inouye: Mr. Chairman and gentlemen, it is indeed an honour for me to have this occasion to speak before such a distinguished assembly. I extend my heartfelt appreciation to those who are giving me this opportunity.

The Japanese delegation consists of Mr. Matsui and myself. With your permission, we have brought an interpreter to assist us in answering your questions.

I was the Director-General of Patent Office of the Japanese Government for about 5 years from 1955 to 1960. After resigning the post, I entered Showa Denko, one of the leading chemical companies in Japan and I am now Senior Managing Director of Showa Neoprene Company, which is a joint venture between DuPont Company of the United States and Showa Denko of Japan.

Firstly, I would like to speak about the relations between patent system and national economy, particularly through our experiences in Japan, and later, Mr. Matsui will make a statement regarding our views on certain points of your Patent Bill from the standpoint of Japanese industry as well as the pharmaceutical producers in particular.

As I am speaking a foreign language I would like to ask your patience and indulgence. I want to read almost all my paper but it will take only 30

minutes or so. In the course of reading I will make some additional explanations.

The Federation of Economic Organizations, whom I represent here today, is the foremost organization of Japan's economic circle, with all the major enterprises participating in its activities. The Federation's voice has a leading influence in our country. The Economic Mission from Japan headed by Mr. T. Adachi, which visited this esteemed country this spring, was organized under the influence of this Federation.

In 1945, when the Second World War ended, our country stood in the midst of devastation. Our young brains were lost and production facilities were in ashes. Today, twenty years later, to many of us this seems merely to have been a bad dream. During this comparatively short period, our economic growth was very rapid, showing a yearly increase of about 20 per cent. In 1964, while the growth rate decreased, it was still as high as 11 per cent and our national income *per capita* reached 570 US dollars, tripling that of ten years ago. For your information, in 1965, it was 680 US dollars.

The major factor contributing to this extraordinary growth was the induction of superior technology from advanced countries abroad. It was decided that the most efficient and the safest way to fill the technological gap, created by the war, was to bring in technology which already had been proven successful on a commercial basis abroad. Japanese industries vied for such technological induction. As a result of this, today, a number of these industries have acquired worldwide standing which they would never have attained without the technology from abroad.

In 1955, Japan's payment for overseas royalties was 17 million US dollars. In 1965, this increased to 164 million US dollars. These figures, alone, may seem to indicate a large drain on our foreign exchange reserve. However—and this is a very

important point, I think—if we were importing from abroad, today, the products which we are now producing domestically, we would be paying for their importation more than tenfold the royalties we are paying to produce them ourselves. Furthermore, the royalty payments can often be quickly offset by income from the exportation of the product concerned. Outstanding examples of this are our nylon and transistor radio industries which have brought in tremendous profit, far exceeding the amount of royalties paid out.

Japan's export of technology is not, as yet, large. Royalties received during 1965 amounted to 13 million US dollars, 8% of royalties paid out during that year. In recent years, original research and development in Japan have become even more active and a number of unique domestic technologies are being commercialized. All this is indicative of the beneficial effects of technological induction.

In looking into how and why a wide variety of technological induction took place and continues to take place in Japan, the outstanding reason is found in the existence of a long-standing, well-established patent system. Ever since she joined the Paris Convention for the Protection of Industrial Properties in 1899, Japan has respected and sufficiently protected, irrespective of nationality, patent rights which are regarded as products of the intellectual efforts of human beings. This attitude invited applications from abroad, and the assurance of sound protection of new inventions in the form of granting solid patent rights encouraged those abroad to transplant to Japan their know-how, when asked for.

The patent system of Japan is 81 years old this year. In 1899, while the patent system was still growing roots, Japan joined the Paris Convention, and clearly indicated her policy that Japan would benefit most by protecting inventions of other nationalities as well as her own.

Since then, modifications of the patent system have been made to accommodate various socio-economic changes. The patent law of Japan, as I said just now, was enacted in 1885. After minor changes were made three times, the amendment of patent law was put into effect in 1921. Then, 38 years later our current patent law was born in 1959, nearly seven years ago. But the basic principle of attempting continuous technological progress through the protection of inventors and the public disclosure of technology has never once been changed.

The number of patent applications in Japan are growing year by year. Especially in recent years, enterprises are becoming evermore active in research work to cope with technological innovations and the liberalization of foreign trade, and their attitude of wanting to protect such research results in the form of patent rights, manifests itself in the rapid increase of patent applications. Since 1962, the number of patent applications has increased at the rate of 10 to 20% each year, and during 1965, 82 thousand applications were made. When the number of applications for utility model is added to this figure, the total number of applications amounts to 180 thousand, ranking first in the world. Ten years ago the number of applications was less than half this figure.

It is noteworthy that the number of patent applications by foreign nationals are increasing remarkably in Japan. There were only about 7,000 such applications in 1955 but during 1965 this number increased to 21 thousand, which means that 26 per cent of the applications submitted during 1965 were by foreign nationals. This may seem not to be very large. However, for ultra-modern technology, such as the chemical field, the rate of applications tendered by foreign nationals exceeds 50 per cent of the total.

As for the granting of patents, less than 50 per cent of the applications made by Japanese nationals pass exa-

mination and become registered, while the rate of registration by foreign nationals is as high as 70 per cent. This fact proves that patent applications from abroad are more frequently of superior quality. In other words, 26% at the total applications by foreigners enjoy 36% at the total registration.

Such figures were achieved only because foreign nationals have had no doubt as to the sufficient protection of their patent rights under the Japanese patent system. In light of our experience regarding the smooth induction of foreign technology, while its role may not have been conspicuous, our patent system is the greatest single hidden contributor to the development of Japanese economy to the present level.

While Japan acquired much technology from abroad, she does not rely on this alone. Very serious efforts are exerted for the development of domestic technology.

I would like to emphasize this point which I am going to say now. When the number of patent applications from abroad was rapidly increasing and when numerous technical tie-ups between Japanese and foreign companies were causing large sums of overseas royalty payments, there were those in Japan who seriously questioned the effect of patent rights protection as being against Japanese national interest. At that time, the majority believed, and it is still believed, that the original purpose of the patent system is not to allow an individual to hold in secret the intellectual products of his brain, but to lay it open to all so that industry and society as a whole will benefit from it. In compensation for this, the individual is given the right of exclusiveness during a limited period. New technology thus made open will then stimulate other researchers toward further studies and as a result will become the basis for new and better inventions. In other words, level of technology is continuously upgraded by pooling the results of the

individual researcher for the benefit of all researchers. The patent system was born of human ingenuity, where it made possible for all to strive toward "better inventions through inventions". Therefore, it is necessary that inventions by foreign nationals be brought to Japan. What will happen if limitations were placed on our present patent system? It will mean that legal protection given to technology will be weakened, and this in turn, means less compensation given to inventors. That would certainly be of no help toward inducing better quality inventions. Where there is doubt and uneasiness as to the protection given by law, no new and useful technology from overseas will be forthcoming into Japan. Such a state will cause a wider technological gap between Japan and the other countries of the world. Whether it be a Japanese patent or a foreign patent, newer technology will help in developing our industry and this will stimulate the advancement of Japan's technology as a whole.

In any country, what can be more desirable than the existence of a high degree of inventiveness among the people? Inventions add to society something that did not exist before without depriving it of anything. The best way to encourage inventions is the patent system, and only under a reliable patent system will it be effective. This applies to foreign nationals as well.

We fear that if legislation was made whereby people, especially those abroad, would lose the desire to apply for patents and to supply technological information, it would be very much against the nation's interest since it will mean that the nation is attempting to sail against the international current.

I recall that the late Prime Minister Nehru said to the effect that one can easily let one's garden go wild, but it is no easy task to turn back the wilderness into a garden. The flowers of invention, indigenous and foreign, are blooming more and more in number and in variety in this garden of

yours, and indeed it is my heartfelt wish that this atmosphere in no way be clouded.

We have great respect for India's achievement in international society as a leading world nation and for the serious efforts you are making toward the realization of various policies for the better development of your economy. The Economic Mission from Japan had an opportunity recently to discuss with your people the general economic problems our two countries face, and it was mutually confirmed that the strengthening of cooperation between the two countries will not only benefit us both but would contribute greatly toward the world as a whole. Business circles of Japan highly value the results of the Mission's visit, and the people of Japan earnestly desire an even closer friendship with the people of India.

We, in Japan, have a strong desire that whatever changes be made in your patent system are not of a nature that would possibly impede Indo-Japanese economic cooperation. Based on this thinking, I would like to express our concern over some of the articles in your Bill. (Please refer to my memorandum Page 9-10).

In concluding my testimony, may I point out that we, in Japan, are all sincerely desirous that the proposed patent bill will not hinder the growing inventiveness and research activities, and will not thereby become a debit instead of a credit to the development of your industries. It is also earnestly hoped that the bill will not mar India's good reputation in international society, and in particular, impede the growing economic relations between your country and Japan.

May I reiterate our experience and belief that a nation's development can be achieved if her patent system fully indicates the original purpose of such a system, namely the protection of inventors.

Finally I express my deep appreciation to you for your close attention,

and hope that what I have said here today might be of some benefit to you in future deliberations on this subject at your esteemed Parliament. Thank you.

Mr. Shoji Matsui: Your Excellency and Gentlemen.

It is a great honour and pleasure for me to deliver an opinion on the planned revision of the Indian Patent Law on behalf of the Japan Patent Association, Japan Pharmaceutical Manufacturers' Association and Japan Pharmaceutical, Medical and Dental Supply Exporters' Association.

I would like to make my statement not from the general point of view but from our actual experience and after that, I would like to point out some points which are considered very important and controversial in Japan regarding your proposed Patent Bill.

Personally, I have long been engaged in various patent affairs, including licence work with firms abroad as the manager of the Patent & Licence Department of the biggest pharmaceutical manufacturer in Japan and as the Chairman of the Patent Committee of the Japan Patent Association. Also, recently, as the Chairman of the sub-committee of the Japanese group, I had a chance to study the subject of "The Model Patent Law for the Developing Countries and the Role of the Patent System" which was discussed as one of its agenda at the AIPPI Tokyo General Meeting held in this April.

For your reference, I tell you that the Japan Patent Association is not composed of specialists in law, but is a group of enterprises, the aim of which is to study the patent system from an industrial view point.

My opinion to be delivered hereafter has been derived from our experiences through 80 years history

of the patent system of Japan which has played an important role in the development of the Japanese industry to the present prosperity. I would like to tell you that stronger the protection, the more advanced a country is technologically. I would like to give three examples.

In the first place, I wish to mention the fact that the processes for manufacturing chemical compounds are conspicuously developed in our country to the extent that the number of patent applications in the chemical field amounts to 30 per cent of all the patent applications, and that there are not a few examples to show that compounds invented and manufactured first in foreign countries are manufactured in our country according to some other new process developed indigenously.

However, in respect of research activity of creating useful and novel chemical compounds, it can be said that the achievement is not so remarkable as in the field of the manufacturing process.

It is well admitted in Japan that the afore-mentioned fact is attributable to the manner of a protection of invention under the Japanese patent system.

The Japanese Patent Law does not grant patent protection to the substance itself in the field of chemicals and drugs, but grants patent protection only to the process of manufacturing such compounds. Therefore, researchers and industrial concerns have been obliged to concentrate their creative efforts on discovering new processes which have possibility of being placed under the protection of the patent law rather than on finding new compounds or drugs. But an exception can be seen in the field of antibiotics.

In Japan, many novel antibiotics such as Kanamycin, Fradiomycin.

Trichomycin, Leucomycin, Sarkomycin, Mitomycin, and Brasticidin have been discovered. These are very important drugs in Japan, having been discovered by ourselves.

Although in the field of antibiotics also patent protection is given only to the manufacturing processes, the Japanese patent office has granted a wide scope of claims to such processes which cover new antibiotics manufactured for the first time.

As a consequence, such process inventions as above enjoy an ample protection which is almost tantamount to product patent, resulting in spurring incentive to have pharmaceutical manufacturers concentrate their efforts on discoveries of new antibiotics.

In anticipation of this powerful protection under process patents in the field of antibiotics, more strenuous efforts of research have been directed to finding original antibiotics rather than to finding new processes for manufacturing the same old antibiotics.

We believe that such endeavours were mainly responsible for the discoveries of many novel antibiotics as mentioned above.

These facts delivered above tell us that the creation of the invention is spurred in such a situation where the patent protection is strong and sufficient.

As another example, I would like to tell you that Vitamin B1 is manufactured in Japan. Japan is the biggest Vitamin B1-manufacturing country. We are exporting Vitamin B1 not only to the United States but also to many European countries and Takeda is one of the manufacturing companies in Japan.

During the infancy of Vitamin B1 manufacturing technology in Japan, a foreign company obtained several

Japanese patents covering a wide range of Vitamin B1 synthesis methods. As a result, Japanese pharmaceutical manufacturers had to work hard to find out a new process to manufacture Vitamin B1, a very important substance for the Japanese, which did not fall within the scope of the patents held by the foreign Company. If there had been an easy way to imitate or make use of the patented processes, Japanese companies would not have made such efforts for finding out new processes at the sacrifice of a large amount of money.

From this, it could be said that the fact that a Japanese company invented new and economical processes for manufacturing Vitamin B1 enabling Japan to export Vitamin B1 so manufactured was ascribable to the patent system and also to the patent protection thereby given to the foreign company.

Now Japan has come to enjoy an active export of Vitamin B1 to many foreign countries.

It should be borne in mind that the stronger the protection, the more the technique will advance. I would like to emphasize here three points and I would like you to know our actual experience in this regard. I would add a few comments regarding the problem of know-how. Our experience shows that even an imitation following a prior art can hardly be done by simply referring to literature or patent specifications without know-how. It is noteworthy that most of the useful know-how will be introduced only accompanying foreign patents.

I myself went to Germany only to purchase the know-how-on patents. Two years ago I went to Austria; though the company is very small, they had an excellent know-how. I went to Italy to buy technical know-how. Why is know-how so important? Know-how mainly concerns the process which increases

the yield of the manufacture or improves the quality of the product. Then we can produce the same thing at a lower cost. More than that, the know-how can be used in the field of other drugs. For instance, we have been introducing technical know-how from American Cyanamide Co. in connection with the manufacture of tetra cycline. We are paying royalty and when we are paying royalty, we are obtaining the up-to-date technical know-how free of charge. That charge is included in the royalty but by obtaining such technical know-how the cost of manufacture of tetra-cycline sharply went down. Why the inventor did not try to obtain a patent regarding know-how is a problem. The technical know-how concerns very small section of the manufacturing process. If the know-how is disclosed on the paper, many people can use that know-how but the inventor of the know-how cannot detect those who are using it free of charge. Then he does not try to disclose the know-how. He only discloses the main part of the invention by patent specification. That is why I consider that the know-how is important in connection with the patent protection.

That is my statement from the general point of view. I think I have finished my statement up to page 5. From page 5 I have given my opinion regarding the respective provisions of your proposed Patents Bill which I would like to briefly mention.

First I would refer to Sec. 48 of your proposed Patents Bill. This refers to patent rights not infringed when used for certain purposes. In Japanese Patent law this kind of provision is not included. We do not have it. I think this section will not only affect the foreigners adversely but also will affect adversely your future progress of technology and industry because if this kind of provision is included in your Patents Bill, I think there is a great fear that the importation or making can

be readily carried out under this section. Many people would be discouraged to invest for new plant or to introduce foreign technology under patent rights. That is a reason why I would like to recommend deletion or amendment of this Section.

Section 53—term of patent—in this section the most problematical point is the duration of the patent which is stipulated as 10 years. In Japan there is no discrimination in the duration of the patents irrespective of the field of invention. All patents are under protection for 15 years. From the date of publication the patentee has the right to enforce his patented right to exclude others from using. From that date patent rights start and they continue for 15 years.

In Japan we do not have any provision for renewal of the life of the patent. 15 years is final. But in the pharmaceutical industry many leading companies now consider this 15 year protection as too short because it becomes very difficult to find new drugs which cost more and more and one new drug can be created only out of 3000—5000 products. The cost is very high now. This 15-year protection seems to be a little short in the pharmaceutical field. Even when one discovers a new drug effective for one disease, we have to carry out more and more research—safety test, clinical test, etc. Though in Japan it is not strict as in the United States, it takes a very long time and generally it takes more than five years before a new product is on the market. We have much experience in licensing agreements where a patentee wants to get royalty after the expiration of the patent. I have personal experience of a licensing agreement by which a company will pay royalty after the expiration of the patent in Japan. On the other hand, we have the case in foreign countries where after the expiration of the patent, we still get royalty from the licensee. If a patentee has spent a lot of money

for a new drug, of course, the patentee would like to cover such expenses by obtaining royalties. Than sometimes a patentee wants to get a royalty after the expiration of the product. Therefore, looking from these points of view, ten years, I think, is a short period and it would discourage the inventor from giving the licence to your country.

Sections 66 and 89 concern the revocation of patent in public interest. In Japan this kind of provision is not included. The old law had this type of provision but it was never used and it only gave fear to foreigners. In our opinion, it was a harmful provision from the point of view of introducing foreign technology from other countries. But in a recent revision of the patent law, this provision was not included and so our present law does not include this revocation provision and there has been no harm to Japan so far.

So from our experience, I would like to recommend that this clause be either amended or deleted.

I understand sections 84, 93, 95 and 97 concern compulsory licence. The idea of compulsory licence to work the patented invention is adopted by the Japanese Patent Law as well as in the Model Law drafted by BIRPI. But frankly speaking, the ground for granting a compulsory licence in this Bill is very severe and has the effect of placing undue and strong restrictions on the rights of a patentee. For example, sub-section (2) of section 84 provides that even a contractual licensee is entitled to apply to the Controller to amend or modify the existing right of contract. According to sub-section 2 of section 93, the Controller may cancel an existing licence when he thinks fit in granting a compulsory licence. I think this is a bit too strong, looking from the Japanese way of thinking.

The next point is sub-section 3 of section 93. This sub-section provides that in granting a compulsory licence, the Controller may by order dep-

rive the patentee of any right which he may have as patentee and revoke all existing licences in respect of the invention. This way of thinking is not an acceptable way of thinking in Japan. I think this is too strong because the contractual licence was last agreed between these parties, and we, Japanese, would like to respect an already existing contract. My opinion comes from such a point of view.

Moreover, sub-section (3) of section 95 provides for Governmental authorisation of importation in case of compulsory licence. I think this clause concerns section 48. This is not good for your country in introducing foreign technology. I understand this sub-section 3 of Section 95 concerns the governmental authorisation for importation and one other point is sub-section 1 of section 97. Under this sub-section 1 of section 97, the Government may designate the patent at any time, with regard to which the compulsory licence shall be granted, in order to satisfy public interest only by making a declaration to that effect in the official Gazette. I think, this is too severe as compared with Japanese compulsory licence system. Fortunately, I have the English translation of current Japanese Patent Law. I would like to leave it here for your perusal. Of course, in Japan we have provisions regarding compulsory licence system. The three cases where compulsory licences are granted in Japan are—(i) in case a patented invention has not been adequately worked for more than 3 years; (ii) in case the working of a patented invention is particularly necessary in public interest; (iii) if the junior patentee's invention cannot be worked without using senior patentee invention. In that case the junior patentee can ask for compulsory licence through senior patentee. These are the three cases in Japan of compulsory licences. Of course in that case, there has to be mutual consultation. If the agreement could not be reached between the

patents then a special committee will consider the case and give award and sometimes compulsory licence will be granted and sometimes not be granted. And if the royalty rate decided at such special counsels for granting compulsory licences is not acceptable, a patentee can appeal to the law court for increasing, or sometimes decreasing the royalty rates. Of course, there are much more complicated due processes to protect the rights of patentee. This is only for your information.

I would like to mention regarding your Sections 87 and 88. Those sections concern "Licences of right" and fixed royalty rate. As regards licences of right, we do not have this kind of provision in our Japanese Patent Law. In Japan, if patent-holder would like to show his intention to give licence to anybody, he can put his intention on the specification, voluntarily he can do that, but no such compulsory obligation is there. I think this is too strong, too severe. Specially, in pharmaceutical things, as I told you, it takes more than 5 years generally to exploit and to launch the product on the market. If licence of right was described on the specification at the time the patent was granted in your country, I am afraid, all patents concerning pharmaceuticals will be destined to be revoked, because within 2 years it will be very difficult to work. That is the reason why—I do not like this to be included in your Patent Bill.

The next point is regarding the royalty rate. I understand, 4 per cent of ex-factory works' price is set in these provisions. But fundamentally, I think, it is very difficult to set a ceiling on royalty rate. Our fundamental thinking is royalty rates should be decided case by case and sometimes less than 4% and sometimes more than 4%—and it is the usual international practice also that the royalty rate will be counted on net sales price of manufacturers but not on the net ex-factory works price, as provided in this. I think,

this way of thinking is not usual, Internationally, this is not the accepted way of thinking. As you know, Japan was one of the very poor countries which needed technology to be imported from foreign countries. Then in order to save the loss of foreign currency, it was true that the Japanese Government has made a great effort for selecting foreign technologies to be introduced, taking into due consideration their importance for developing and promoting the technological research and industries in Japan by sometimes ordering amendment or modification of contractual agreements, when such stipulations are disadvantageous to Japan, Government orders amendment, and if the patentee foreign industry do not agree to amend that, it was very difficult to introduce that technology. But in our experience, mutual agreement was finally reached.

One point I would like to emphasise is, it is hardly deniable that also in Japan, there is a minor opinion of desiring to put strong restrictive conditions upon the patent rights or to weaken the patent rights, but this minor opinion apparently aims at enjoying the benefit from easy imitation of techniques invented or devised at the cost of someone else. Therefore, it may safely be said that this minor opinion is supported confinedly only by small number of enterprises which are far behind in research activities.

Next point is concerning Sections 99, 100 and 102. I understand these provisions concern Governmental use and acquisition of the patent right. Frankly speaking, this kind of provision is not included in Japanese Patent Law. Old Patent Laws included this kind of provision, but there was no benefit under these provisions. It is only harmful to the sound growth of technology, because foreign investors feared that this clause might be forced in certain cases. Then at the time of revision of our Patent Law, this kind of

clause was abrogated. The present Patent Law does not have it.

Next point is concerning section 116. This provision concerns limitation on appeal to the law court regarding the administrative decision. In Japan, against all kinds of administrative decisions . . . In Japan, the public can appeal to courts for relief against all kinds of administrative decisions, not only in patent cases. I think in your country this restriction on appeal in this patent law is too restrictive. I think this must be broadened a little.

Lastly, I would like to mention that section 162, which shortens the period of the patent for pharmaceuticals to 10 years with retroactive effect will have an undesirable effect. In Japan the patent law was amended many times, but it never deprived the public of any right. I think this retroactive effect will create a feeling of distrust among the people.

As a conclusion, I would like to suggest, through our experience, that in developing countries the moderate compulsory licence system in combination with flexible operation of other legislation, such as our Foreign Investment Law which can control a payment of foreign currency from the viewpoint of financial situation without depriving the patentee of his fundamental right, will produce satisfactory outcome for the development of their industries.

Lastly, I express my sincere thanks for your kind attention. Thank you.

Dr. C. B. Singh: Table No. 1 of your Supplementary Material gives the production values of pharmaceutical industry in Japan for the years 1960 to 1965. Do you think this increase is the result of strong patent protection?

Mr. Shoji Matsui: Patent protection is one of the big reasons why our industrial production has gone up. There are many other reasons. For instance,

the demand for medicines in Japan has increased because of the increasing standard of living in Japan and because of the introduction of the Health Insurance System. More than 99 per cent of the whole nation is now enlisted under this scheme, by which they can receive medical treatment very easily. Then, the total consumption of pharmaceuticals has increased very much, and the pharmaceutical industry expanded its capacity to meet the demand.

Dr. C. B. Singh: In Table 3—Amount of domestic supply of medicines (1961) the figure for Japan is given as 601. Why has it gone up so much? Will it be correct to assume that it is as a result of the rising standard of the Japanese economy?

Mr. Shoji Matsui: The import of pharmaceuticals from foreign countries is not so big as compared to domestic consumption. One of the biggest reasons for production increase is increase in domestic demand. The Japanese pharmaceutical industry can thrive on such demands and can expand its factories to meet such demands.

Dr. C. B. Singh: On page 3 of your statement, you have made a statement at one place that you are more or less protecting the process and you have given preference to the processing of products at some other place. In other words, it is rather confusing. Do you want patents for the process or for the products, or do you want a combination of the two?

Mr. Shoji Matsui: In Japan, we have now the process patents, but recently, some leading pharmaceutical industries wanted to introduce product patent system in Japan, because under the process patent system, when one company invents a new product, they have to defend some other people imitating the same product by using some other process. Then, a company who invented quite a new product, has to make effort so as to defend it and not to

progress upon it. That is one of the defects of the process patent system. Leading companies who would like to find new drugs would like to introduce product patent system, preventing others from doing so. By introducing the product patent system, one inventor who invented new compounds, can concentrate its effort for finding another new drug. Opinions are 50-50 in Japan. I may say it very frankly.

Dr. C. B. Singh: Evidence has come that process has become more or less standardised, and by the same process, with slight modifications, probably you can produce many products. The processes have become more simplified, and as a result of this, the modern tendency is to include both process and product. Now, will you tell us clearly whether it will be an improvement if in our Bill we bring the process along with the product in the matter of patents? Will that be an improvement, according to your opinion?

Mr. Shoji Matsui: Do you mean which is better, product patent, or process patent?

Dr. C. B. Singh: Process *cum* product.

Mr. Shoji Matsui: That is a very difficult question. I think in your country product by process patent will be better at the present stage, but in future, you must introduce product patent.

Mr. Chairman: In your statement, you have stated that process patent in Japan has contributed largely to the greater inventions for new processes, and it has developed your pharmaceutical industry very much. Do you stand by that statement?

Mr. Shoji Matsui: Yes, according to the system of process patent, our processes developed very much in Japan, but in the United States, they have product patent system.

Mr. Chairman: We are not concerned with the United States now. I

want your opinion about your own industry. You have said that the process patent in Japan has really contributed to the industrial development of Japan. Is that correct?

Mr. Shoji Matsui: Yes.

Dr. C. B. Singh: On page 4, the witness has mentioned that as a result, Japanese pharmaceutical manufacturers had to work hard to find out a new process to manufacture Vitamin B₁, which is very important for the Japanese, which did not fall within the scope by the patent held by the foreign company. That is why I am raising this question. There is a doubtful exposition here, according to his own statement. I want him to clear that point.

One more thing. On page 6, it is mentioned that the clause empowers the manufacturer to import any patented medicine or drug not only for its own use but also for distribution to the hospitals or medical institutions maintained by or on behalf of the Government. What objection has he got? Ours is a sort of democratic socialism, and we need all these things for the general use of the poor people. If the Government want to take it, do you mean to say that the Government would pay compensation and compensate the companies?

Mr. Shoji Matsui: At least Government must pay some compensation.

Dr. C. B. Singh: Lower down, you have mentioned that each sub-section of section 48 has every possibility of being widely applied, depending on the interpretation of the wording "for the purpose merely of its own use", because nothing is specifically defined by "the purpose of governmental use." You have also said that the wording "by or on behalf of the government" adopted through sub-sections (a), (b) and (c) makes it possible to be interpreted that importation by any person shall not be deemed to infringe a patent right, as far as it concerns the governmental use.

Mr. Chairman: Suppose there is an epidemic and we want certain medicines. Government has to take action. To meet such emergencies, this provision is made. These powers are vested with the Government of Great Britain, Germany, etc. This provision is made to vest the Government of India also with that power. What will satisfy you, as a patentee?

Mr. Shoichi Inouye: In Japan we do not have any system like that. In case of emergency Government will take recourse to compulsory licensing. That is enough.

Mr. Chairman: Compulsory licensing means authorising somebody to set up a factory and manufacture the drug. That will take time. But when there is an epidemic, we want medicines immediately. We will give a licence of right and anybody can import or manufacture it. In such circumstances, what will satisfy you as a patentee to give the drugs to us? There was an outbreak of plague in Bombay and a particular drug was sold at a very high cost. One of our research institutions wanted to manufacture the drug in India, but the company came in the way and frustrated the attempt for 3 years or so, by which time the need was over. To meet such emergencies, this provision is made.

Mr. Shoji Matsui: In Japan we do not have such a system.

Mr. Chairman: Here our people are poor and we must supply the medicines to them. If the patentee refuses, what is to be done?

Mr. Shoji Matsui: I think the cases must be more specifically described.

Mr. Chairman: The section is quite clear. Only in such circumstances the licence of right will be granted. If you want some compensation, that can be looked into. But the power must be available to the Government to take action in such emergencies. I hope you agree to that.

Mr. Shoji Matsui: Yes.

Mr. Chairman: We will adjourn now for lunch and meet at 3 P.M.

(The Committee then adjourned to meet again at 15-00 hours)

(The Committee re-assembled at 15-00 hours)

Shri Kashi Ram Gupta: You have mentioned that a lot of foreign capital is employed in Japan. May I know whether this is in collaboration with the Japanese capitalists or that capital is independent of the Japanese capital?

Mr. Shoichi Inouye: That is in collaboration with Japanese capital. In joint investments between Japanese and foreign people, the ratio of the share capital is dependent upon each case, but generally speaking the maximum is on a 50 : 50 basis. In many cases the Japanese side has a majority.

Shri Kashi Ram Gupta: Do you mean to say that there is no foreign concern which has got the total capital investment without any Japanese capital?

Mr. Shoichi Inouye: Generally speaking, no. But, I am afraid my answer has led to some misunderstanding. There are two types of investments with foreign collaboration. One is the establishment of a joint company between Japanese people and foreign people. There is also the other type where the contracts are only to induce foreign technology into the operation of Japanese companies.

Shri Kashi Ram Gupta: Is it a fact that in the pharmaceutical industry in Japan American capital predominates?

Mr. Shoji Matsui: In the pharmaceutical industry, in most of the cases, only technical introduction is seen. Japanese companies introduce

foreign technology or know-how only by paying lower fees. But in some other cases Japanese companies establish joint investment companies and manufacture the product. If you take the ratio of joint investment companies and simple technical introduction, I think the number of cases where only simple technical introduction is done will be more.

Shri Kashi Ram Gupta: Is it a fact that the largest number of patents in the pharmaceutical industry in Japan are owned by Americans as foreign concerns?

Mr. Shoji Matsui: At present the position is that a large number of patents in pharmaceuticals are owned by Americans among foreigners.

Shri Kashi Ram Gupta: In your Patent Act is the date of publication different from the date of filing of the application?

Mr. Shoji Matsui: In Japan the life of the patent starts from the date of publication. At the same time, the life of the protection starts.

Shri Kashi Ram Gupta: Is the date of publication the same as the date of filing of application?

Mr. Shoji Matsui: No.

Shri Kashi Ram Gupta: What is the difference between the two?

Mr. Shoichi Inouye: After the receipt of the patent application by the Japanese Patent Office, the examiners will take some time to examine it. When the application passes that examination, the Patent Office will publish it in the Official Gazette. That is the date of publication.

Mr. Chairman: What is the time lag between the date of application and date of publication?

Mr. Shoichi Inouye: As I explained in the morning, the number of patent applications received by the Japanese Patent Office has increased by leaps and bounds. So, it will take a longer time now to examine them compared to the position a few years ago. It also depends upon the field of technology. For instance, in the field of petro-chemicals and electronics there are so many important applications compared to other fields. In a field where the applications are so numerous it will take 2½ years to 3 years.

Shri Kashi Ram Gupta: What is the time lag between the date of publication and the date of grant of patent?

Mr. Shoichi Inouye: After the publication of a patent application there is a time limit for opposition. During the two months any person could raise objection. If there are several objections, it will take a longer time to grant a patent. If there is no objection, it will be granted immediately after the period of two months is over.

Shri Kashi Ram Gupta: Suppose there is objection from many quarters. How much time will it take to get a patent?

Mr. Shoichi Inouye: It will depend upon the nature of the patent, the objections raised etc. Generally speaking, it will take six months to one year.

Shri Kashi Ram Gupta: Are you aware of the fact that there is a patent Bill in Italy which provides a period of ten years for drugs? Has your industry sent any memorandum to Italy in this respect?

Mr. Shoji Matsui: I understand that in Italy there is no patent protection for pharmaceuticals. They have a Bill under study.

Shri Kashi Ram Gupta: They have introduced a Bill in July 1965. It is on the anvil.

Mr. Shoji Matsui: Yes, they have a Bill under study. But I do not know when it will be passed.

Mr. Chairman: Have you opposed it?

Mr. Shoji Matsui: No. My understanding is that it will take a longer time before it becomes law. I do not know, I have some connection with the patent attorneys in Italy; I have not received any information from them.

Mr. Chairman: The model law also prescribes a period of ten years.

Shri Kashi Ram Gupta: On page 49 of the model law there is a commentary that in certain cases the period can be 10 years from the date of grant of the patent. Some countries have it from the date of publication and some from the date of specifications—that means the same thing—but they say that some countries want it from the date of grant of patent in which case the period can be ten years.

Mr. Shoichi Inouye: Mr. Matsui was in charge of the model law as the Chairman of the Patent Committee of the Patent Association of Japan; so, he would be giving you an answer.

Mr. Shoji Matsui: This sentence reads "at least ten years from the grant".

Shri Kashi Ram Gupta: Are you agreeable to this?

Mr. Shoji Matsui: I think, at least ten years from the grant is all right, but in the pharmaceutical industry many companies in Japan need 15 years for making investment to find new drugs. That is my opinion and also Japanese opinion.

Mr. Chairman: You are a party to this model law.

Mr. Shoji Matsui: I understand, this model law was drafted by some 10

or 20 developing countries, but Japan was not on the drafting committee.

Shri Kashi Ram Gupta: You have given certain suggestions for deleting or amending certain clauses of the Bill. Most of them relate to drugs. Are you aware of why these clauses have been brought in by Government? It is mostly because we have the experience of the working of patents by foreign concerns and their misuse. In the light of that we have put in these clauses. Have you considered that? When you gave your opinion, were these points before you? Did you know what was the background for bringing in these clauses?

Mr. Chairman: They would not know it.

Shri Kashi Ram Gupta: Why could not Japan make use of the Indian patent law as it exists today up till now?

Mr. Chairman: They are collaborating in India.

Shri Kashi Ram Gupta: To what extent?

Mr. Shoichi Inouye: To our knowledge there are about 150 cases of Japanese investments in your country. That is in two forms—one is joint venture or joint investment company and the other is as contract for the introduction of technology.

Shri Kashi Ram Gupta: Are they mostly in drugs industry or mostly in industries other than drugs?

Mr. Chairman: They are collaborating in the electrical industry also.

Shri Kashi Ram Gupta: All right.

How does your present law of 1959 differentiate from your law of 1921? What are the main features of difference?

Mr. Shoichi Inouye: The current patent law provides more protection for the patentee.

Mr. Chairman: What was the earlier protection?

Mr. Shoichi Inouye: I would like to explain it in detail. The procedures concerning infringement of patent rights were not provided for in the old law. The provisions of the civil code were applied. But in view of the special nature of the patent rights, the following provisions were newly established in the current law, namely, in regard to the right to demand discontinuance of act of infringement of the patent right, the presumption of the amount of damage caused by the act of infringement and the presumption of negligence. The provisions concerning revocation and confiscation of patent rights were abolished.

Mr. Chairman: They were there in the earlier Act.

Mr. Shoichi Inouye: Yes. We had the provisions concerning revocation and confiscation in the old law but they were never put into practice.

Mr. Chairman: When were they abolished?

Mr. Shoichi Inouye: In 1959.

Mr. Chairman: Were the provisions of licence of rights also there?

Mr. Shoichi Inouye: We have never had such a system.

Shri Kashi Ram Gupta: You have given your opinion that the period of 14 years for industries other than drugs industry is reasonable. Many clauses of this Bill do not relate to patents other than drugs. May I conclude that you are in agreement with our Bill to that extent in so far as it applies to industries other than drugs?

Mr. Shoji Matsui: So far as period clause is concerned we agree. Ac-

ording to your provisions, the patent right cannot work from the date of application. Then, if the examination takes a long time, the duration should be more.

Shri Kashi Ram Gupta: It is from the date of the completion of the specifications.

Mr. Shoji Matsui: But not the sealing.

Shri Kashi Ram Gupta: Even according to your law, it is not the sealing. I want to know whether you are agreeable to this for industries excluding the drugs industry.

Mr. Shoji Matsui: Yes.

Shri Shyamnandan Mishra: I want to seek one clarification in respect of Table No. 16 of your Supplemental Material. There, a comparison has been made between the prices in Japan and in the United States. I am not able to understand which is the price in the United States and which is the price in Japan.

Shri Shoji Matsui: Price 'A' is the Japanese price.

Shri Shyamnandan Mishra: That is not mentioned there. If price 'A' is the Japanese price, it is quite favourable. That is all right.

The second point is whether in your country any correlation has been established between the grant of patents and the inflow of foreign capital. This document is a valuable document. I think this would serve us a great deal even with regard to the understanding of the Japanese economy and its growth. We are grateful to you for supplying this information. But we would also like to know whether you have any figures with regard to the inflow of private foreign capital from the United States or from any other country and, if so, whether you can establish some kind of relation bet-

ween the grant of patents and the inflow of the private foreign capital, that is, you can say, for example, over a period of 10 years or 5 years the number of patents granted is so much and the amount of private foreign capital is so much. I would like to know something about that. This point has been very much stressed in the evidence before us. It has been said that if you want a large amount of private foreign capital to come to your country, then you should be quite liberal with regard to the provisions in respect of patents. I would like to take some lessons from the experience you have gained in Japan. Have you got any figures in respect of this?

Mr. Chairman: That will be from 1959 to 1965.

Shri Shyamnandan Mishra: This information is not contained in this note.

Mr. Chairman: How far the flow of capital increased as a result of the amendment to the Patent Act, 1952?

Shri Shyamnandan Mishra: How much inflow of capital could be related to patent?

Mr. Shoichi Inouye: First I would like to speak about the cases of foreign technology induction in Japan from 1959 to 1965. These are cases of foreign technology induction approved by Government:

1959	153
1960	327
1961	320
1962	328
1963	564
1964	503
1965	472

I would now like to tell you about the total amount of introduction of foreign capital, for the same period.

1959	154 million US dollars.
1960	201 do
1961	505 do
1962	523 do
1963	690 do
1964	738 do

I do not have the figure for 1965.

Mr. Chairman: I think the 1962 figure is wrong.

Mr. Shoichi Inouye: It is 523 million U.S. dollars.

Shri Shyamnandan Mishra: This seems to be the total amount of foreign capital. What portion of it could be related to the patentee investment?

Mr. Shoichi Inouye: The amount which I mentioned includes technical tie up, i.e., contract of technological introduction and investment on securities.

Mr. Chairman: How much of it is due to liberal patent?

Mr. Shoichi Inouye: I am afraid, I do not have the breakdown.

Shri Shyamnandan Mishra: Would it be possible for you to give that information later?

Mr. Shoichi Inouye: Yes.

Mr. Shoji Matsui: Technical introduction is an investment from a foreign country in the form of technical know-how. The price of the patent right is sometimes calculated by law courts. Such patents are invested as stocks in Japan though cases are few. But in many cases, in regard to technical introduction, there is no official investment of foreign money, but when joint ventures are established in Japan, at that time American/European countries bring money to Japan. We have to consider types of investment.

Mr. Chairman: Can you say how much of this is due to the liberalisation of the Patent Law.

Mr. Shoji Matsui: Do you mean the estimate of the price of foreign technology?

Mr. Chairman: Not the price. How much of this increased investment is due to the liberalisation of the Patent Law that you have passed

Mr. Shoji Matsui: We paid royalty for the foreign patents introduced in Japan.

Mr. Chairman: That is what you paid. They have invested money in your country and you said that foreign investments have increased on account of the liberalisation of the Patent Law. How much of that can you attribute to this liberalised Patent Law?

Mr. Shoichi Inouye: Of course, the contracts of technological introduction have been based on the existence and protection of patent rights. I can not tell how much of foreign investment into Japan was due to the current Patent Law. But we believe firmly that many cases of technical induction were achieved only because foreign nationals have had no doubt as to the sufficient protection of their patent rights under the Japanese Patent Law.

Shri Shyamnandan Mishra: So far as this Table No. 16 is concerned, other prices seem to be quite favourable in Japan, but, so far as this streptomycin is concerned, here the difference is very large. Yours is 83 as against American 28. This seems to be rather large—nearly 3 times.

Mr. Shoji Matsui: The price of streptomycin in Japan is very expensive. The reason why it is high is that production scale is not big; scale of production is not as big as in the United States. Then the cost is expensive in Japan.

I would like to add to my answer to your previous question. Please refer to my Table 22 which concerns the annual savings of foreign exchange made by way of introduction of foreign technology. In 1964 the savings on pharmaceuticals made under foreign technology is shown here. This is almost 9 per cent of the total production of Japanese pharmaceuticals and for this production we paid royalty shown in item (c)—6,398,000 dollars. But if we imported these products instead of introducing technology, we have to pay the same amount with those shown in (d). This royalty payment means that the balance of (a) and (c) which is shown in (f), the final saving of foreign money by introducing foreign technology.

Shri Shyamnandan Mishra: This is very useful, but in that case as you have given information so far as the amount of foreign investment in your country is concerned, can you give us the remittance of profits abroad year-wise? What were the amounts of profits remitted abroad?

Mr. Shoji Matsui: I am sorry that data is not available with me now. We have not studied it. If that data is available we will send it later.

Shri B. K. Das: In the memorandum submitted by the Japan Patent Association of which he is the representative, C147 of our Bill has been discussed on page 4. It says that there is no provision for the burden of proof in any section of this Bill and there would be much difficulty in protecting the right extended to substances made by the patented processes. So it has been suggested that the following phrase might be added at the appropriate place in the Bill. The phrase is: "If a patent is in respect of a process for the manufacture of a new product, the same product manufactured by a third party, shall in the absence of proof to the contrary, be presumed to have been manufactured by that process." So the burden lies on the third party.

Mr. Shoji Matsui: That is a very important point. We have the same provision in the Japanese Patent Law. Art. 104 is the clause under which the burden of proof is shifted to the possible infringer.

Shri B. K. Das: You think such a provision should be there. We have suggested process patent only in our Bill and you think such a provision will be able to protect the right of the process patent adequately in your opinion. But such things have come to our notice that one patentee holds so many process patents—more than one on the possible processes patents—4, 5, 6 or 7—and he is exploiting only one. What is your safeguard against such things?

Mr. Shoji Matsui: In Japan, this is how you interpret the provision regarding the burden of proof. If a patentee has three process patents and is using one patent only and if a possible infringer may manufacture the same product by some unknown process, then even if more than three processes are known, still in Japan the possible infringer has to prove that his process is not infringing upon the rights of the patentee in regard to the product.

Shri B. K. Das: Will such a case be covered by the provision you have suggested? You have spoken of the third party, but if the same patentee holds more than one process patent, say three, and is employing only one process to prevent a third party from doing another process, how do you safeguard against that?

Mr. Shoji Matsui: The provision regarding the burden of proof is always applicable irrespective of the fact that the patentee has one patent or many patents.

Dr. C. B. Singh: On page 3, para 4, he has said "as a consequence, such process inventions as above enjoy an ample protection which is almost tantamount to product patent, resulting in spurring incentive to

have pharmaceutical manufacturers concentrate their efforts on discoveries of new antibiotics."

Mr. Shoji Matsui: In the case of antibiotics, if the main point of invention is in finding new micro organisms to produce a new antibiotic, then according to the practice of examination in Japan, if the first inventor finds one organism, patent is granted not only for one organism but also for many, many organisms. Then the first inventor need not to carry out process study to find out some other micro organisms. If a process patent is given only for one micro organism, then there is a possibility of other people carrying out studies on micro organisms which will produce the same product; and then the first inventor has to carry out research for the process for defence. But in this case, there is no necessity to make a defence research. But in the case of chemical inventions, if he finds one process, the patent is granted for only one process. Then he has to carry out research to find some other processes if he wants to find out other processes by himself for defence. Otherwise other people may find other processes which do not fall within the scope of the first inventor's process patent. Those who find out new processes can manufacture the same product.

Dr. C. B. Singh: On a point of clarification, you have been mentioning different types of micro organisms. Are you referring to different organisms or different salts of the thing? For example, you can have sodium salt or potassium salt or calcium salt of streptomycin. I think you are referring to different salts of the same organism.

Mr. Shoji Matsui: In the manufacturing process of antibiotics, the fermentation process is a very usual one—almost the same in every manufacturing process. In other words, in the manufacture of streptomycin, tetracyclin, etc., the actual ferment-

tation process is very similar. The only important difference is the micro organism to be used for manufacturing the finished product. It is almost impossible from one micro organism to produce streptomycin and tetracyclin at the same time.

Shri B. K. Das: Will not the patent office be able to take care of that, whether it is a new process or a variation of the same process?

Mr. Shoji Matsui: In the patent office, we examine only the specifications. We usually do not look at the actual living organisms. But if a case of infringement comes up and the patentee sues the possible infringer, then the actual strain will be submitted to the law court and actually examined. If the micro organism belongs to the same species which is under patent protection, then it would result in infringement.

Shri R. Ramanathan Chettiar. One question on the general aspect. When our patent Bill was published, people in your country who are actively associated with the pharmaceutical industry and also representatives of your benign Government had expressed lot of misgivings about the Indian Patent Law. Could you explain to us what were the reasons that had impelled you to have misgivings about our Bill? Further in the third week of March, i.e. on the 18th March, you agreed to come before this Hon'ble Committee of the Parliament to give evidence but your Excellency Ambassador here informed our Secretariat that it is not possible for the Japanese pharmaceutical industry to appear here because they want further time to study the Bill and then requested for further date. I would like you to tell us the reasons that had impelled you to have misgivings about our Bill.

Mr. Chairman: You can drop it.

Shri R. Ramanathan Chettiar: They are going to clarify, Sir.

Mr. Shoichi Inouye: We obtained the Indian Patent Bill last year and studied very carefully. I cannot understand the reason why you said about our having misgivings about the Bill. We have no groundless misgivings concerning your Bill.

Shri R. Ramanathan Chettiar: I am glad to have that clarification. Another thing I want to ask is: In the pharmaceutical industry in Japan, could you give us—even if you do not have the exact figure—the percentage of the actual foreign capital and particularly the capital invested by the United States?

Mr. Chairman: He has given it.

Shri R. Ramanathan Chettiar: No, Sir, not the U.S. capital.

Mr. Chairman: All the details are given there.

Mr. Shoji Matsui: I am sorry, I do not have now the actual data about the amount invested by the United States in pharmaceutical field, but I can say that the total amount of the foreign investment is negligible looking from all the Japanese pharmaceutical industry's investment.

Shri R. Ramanathan Chettiar: Negligible?

Mr. Shoji Matsui: Very small as compared with Japanese own investment.

Shri R. Ramanathan Chettiar: You have said in 1962-63, 523 million dollars

Mr. Shoji Matsui: In Japan, as you find, there are 10 or 20 pharmaceutical companies which are producing half of the total pharmaceutical production. These companies are completely Japanese companies. No foreign investment was made. Technical introduction, of course, we are receiving.

Mr. Chairman: Am I correct if I say that the only foreign investment in Japan is that of U.S.A. and no other country has any considerable investment.

Mr. Shoichi Inouye: No, Sir, there are investments from U.S.A., Great Britain, West Germany etc. But, as Mr. Matsui has answered, so far as the pharmaceutical industry is concerned, there is almost no foreign investment. In other words, in other industries like petro-chemical industry, electric machine industry and so on, we can find foreign investment.

Shri C. B. Singh: There are so many American patents working in Japan, if Americans do not invest, it must be their Japanese counterparts that are working the American patents.

Shri Kashi Ram Gupta: In reply to my question, it was clearly mentioned that the largest investment of American capital is in the pharmaceutical industry. That they have said.

Mr. Shoichi Inouye: I would like to make it clear that so far as major pharmaceutical companies are concerned, there is almost no foreign investment, but they have many tie-ups of technological induction. In other words, Japanese Pharmaceutical companies pay for the patent; they are paying royalties to foreign companies but there is no direct investment from foreign companies.

Shri R. Ramanathan Chettiar: What is the difference?

Mr. Chairman: In reply to Shri Kashi Ram Gupta's question, you said that the investments are 50 : 50 and it is mostly in pharmaceutical industry.

Mr. Shoji Matsui: In pharmaceutical industry, there are some joint companies with United States or Germany or England and some of them are on 50 : 50 investment basis, but those are not big but rather small companies.

Mr. Chairman: May be, but you said there are about 21 per cent or so?

Shri Shyamnandan Mishra: That is based on the investment in the smaller ones.

Shri R. Ramanathan Chettiar: Mr. Chairman, that is Italian. You say that there is no foreign investment in the pharmaceutical industry in Japan. In the same breath you also say that it is only a technical tie-up. How do you reconcile these two statements? Earlier you have said that Du Ponds have an interest in Japan, the American Cyanamide Co. have an investment in Japan, a German pharmaceutical combine has got an interest in Japan and a British pharmaceutical concern also has got some interest in Japan. So, how do you say that there is no foreign investment worth speaking in the pharmaceutical industry? It would help us if you could tell us the royalty and the dividend etc. which you repatriate outside your country in regard to the pharmaceutical industry.

Mr. Shoichi Inouye: Under the technological induction contract, Japanese pharmaceutical companies have the so-called licence of patent rights owned by the foreign companies. In these cases the foreign companies do not have any share or stocks in Japanese companies, while the Japanese companies have to pay royalties according to the contract.

Shri R. Ramanathan Chettiar: How much?

Mr. Chairman: That has been given in detail in the memorandum.

Mr. Shoji Matsui: I would like to add one thing to avoid misunderstanding. In Japan, as you know, all those companies are composed of the public interest. At the stock market, everyone can buy the stocks. Even if a big American capitalist would like to buy the stocks of the Takeda, for instance, they can do so, and thereby the American com-

pany can occupy an even greater place in the pharmaceutical industry, but such a thing I have not seen.

Shri R. Ramanathan Chettiar: Are they forbidden?

Mr. Chairman: They are not forbidden. That is what he has said.

Mr. Shoji Matsui: Of course, now, there are Governmental restrictions on obtaining Japanese stocks. But, now, Japan is headed for liberalisation for foreign investment.

Shri V. M. Chordia: Kindly refer to Table No. 15 at page 10 of the Supplemental Materials. The fluctuation in the sale prices of the main pharmaceuticals is so much, and the prices have decreased so much that you yourself admit that in Japan, the price index of medicines for general consumers has shown a considerably decreasing trend of 15 to 30 per cent during 1959-64 as against the consumer price index of general commodities which showed an upward trend of 20 per cent. You have given some reasons also for this, but those reasons are not sufficient to explain how such a big decrease is possible. The high price, I believe, was due mainly to the monopolistic position held by the persons concerned due to patents or some other factors. It was only when they found some competitor entering the field that they started reducing the prices. Due to competition and other factors, the price index which was 100 before had come down to 2.6. How will you safeguard the consumers' interest in such circumstances?

Mr. Shoji Matsui: A change of price take place due to many reasons. I would like to enumerate some of those reasons. One reason is over-production. If the production capacity exceeds the demand, then the produce-manufacturers would like to under-sell it even at a rate cheaper than their own cost. The second reason is that sometimes Gov-

ernment control the price, and due to the artificial control, the price goes down. The third reason is competition between competitors. I think that these three are not good causes for decrease in prices. I think that there are other sound reasons, some of which I would now like to enumerate. One of there is the downward price of raw material. We are importing many raw materials in Japan, and if the price of the raw materials goes down, then the price of the finished product also goes down. The second is the improvement of process due to the introduction of new technology, often resulting in the increase of the yield. That is also one of the reasons for the price going down. Another reason is the improvement of the quality. Improvement of quality means at the same time the going down of the price. Sometimes, a completely new process is invented; at that time also, the price goes down drastically. Another major reason is mass production. In the pharmaceutical industry, mass production is a very essential point for making the prices cheaper. Unfortunately in Japan there are so many manufacturers on the small scale, and that is one of the reasons why the price is sometimes high in Japan. Another factor is the interest on loans. In Japan, the interest on the borrowings from the bank is not so cheap as in the USA. In Japan, many companies have to borrow money from the bank. That is also one of the reasons which affect the prices of pharmaceuticals. Another factor is the income-tax rate in Japan. Corporate tax there is about 45 per cent altogether. Of course, many companies have been asking Government to reduce the rate of corporate tax. The tax rate is one of the reasons why our price is sometimes high.

These are the various reasons which affect the prices. So, it is very difficult to say exactly why the price is high or why the price is low.

Shri V. M. Chordia: You said Government also controls prices. Is there any law by which Government controls the prices, and on what basis do they decide the price?

Mr. Shoji Matsui: No, but reasonable price is usually set. Sometimes Government suggest us administratively.

Shri Bade: In your memorandum, at page 8 you have raised serious objection to sections 66 and 89 and you have said that revocation of a patent in the public interest should not be there. Section 66 is equivalent to section 25 of the old Patent law of 1911. From 1911 to 1966 can you quote a single instance where our democratic Government has acted arbitrarily?

Mr. Shoji Matsui: I realise that your present law includes this kind of provision, but I would like to suggest that this kind of provision will not be beneficial from the long range point of view. One reason is it is not clear when the patent will be revoked.

Shri Bade: I am coming to that. In section 89 there is a provision for revocation, but section 89 is controlled by section 90. Suppose a foreign firm fails to supply at a reasonable cost or fails to manufacture in India any patent medicine, should not Government revoke that patent?

Mr. Shoichi Inouye: In your new Patent Bill you have compulsory licence system. By making use of the system, you will be able to fulfil your emergent requirements. In our opinion, article 66 will not be necessary.

Shri Bade: In India, the condition is, May and Baker has taken 91 patents, and out of those 91 patents, they are only manufacturing two in India. We have to import the rest from foreign countries.

Mr. Shoichi Inouye: In case a patent or an invention is not adequately

worked continuously for some period, you will be able to take action on compulsory licencing.

Shri Bade: Either compulsory licence or revocation is the only remedy.

Mr. Shoichi Inouye: If you take action on compulsory licencing, it will fulfil your requirements. According to my opinion, it will not be necessary to revoke the patent.

Shri Bade: In that case, you have to give four per cent royalty, according to that provision. Here, in the revocation, there is no question of royalty. You have to compensate it.

Mr. Shoichi Inouye: According to your opinion, it is necessary for you to revoke the patent, because, if you proceed towards compulsory licencing, you must pay royalty. But I think revocation without paying any compensation will damage the patentees too much.

Shri Bade: Please refer to page 12 of your memorandum; at line 10 you have said that "by way of this technological introduction, though Japanese pharmaceutical industries paid royalty, importation of foreign-made medicines was prevented to such an extent as saving foreign currency amounting to 99 million dollars in 1964". In what way have you prevented it? Is it by patent or by some other enactment?

Mr. Shoji Matsui: This statement has relevance to Table 22. In Japan it is not always necessary to import from foreign countries. Even in Takeda, we had the technological introduction from some other foreign countries, but still, it is a question of importing finished products from foreign countries. Sometimes, importation of the finished product will be cheaper than manufacturing it in Japan. But in many cases, manufacturing in Japan under technological introduction can save foreign money than in the case of importing. I have shown the figures here.

Shri Bade: Our difficulty is that 90 per cent of the pharmaceutical manufacturers are from foreign countries and they are exploiting our consumers and the poor people, by preventing patents and creating a monopoly. What should be the remedy except by passing this enactment?

Shri K. V. Venkatachalam: Can you give some examples of finished pharmaceuticals being imported?

Mr. Shoji Matsui: Librium.

Shri K. V. Venkatachalam: You are importing it from ROCHE, Switzerland. Not from Italy?

Shri Shoji Matsui: Not from Italy. Japan is not importing much pharmaceuticals from Italy, because in Italy, though some kinds of pharmaceuticals are cheap, in Italy itself the price is high. We import at a lower price. In Italy there is no patent protection for pharmaceuticals field. Japanese industry would like to refrain from importing some products from the country where no protection is given.

Shri Bade: What have you to say about the creating of monopolies to the patentees?

Mr. Shoichi Inouye: If the patent is not worked continuously for some period, you can make use of compulsory licensing.

Shri R. P. Sinha: Your table 17 gives the number of foreign patents held by foreigners in Japan. What percentage of these foreign patents are worked in Japan?

Mr. Shoichi Inouye: In page 5 of my statement, I have said that the rate of registration of patents by foreign nationals is 70 per cent of the total patent applications by foreigners. Most of them are of a superior quality.

Mr. Chairman: How many of them are worked in your country?

Mr. Shoji Matsui: There is no trouble so far in Japan due to the

non-working of the patents owned by foreign companies. Of course, we have to pay some royalties and the price becomes high. But that difficulty is offset by our import regulation system.

Shri P. R. Sinha: Have you got any idea of the percentage of royalty paid on the total cost or on the sales?

Mr. Shoji Matsui: Royalty rate is calculated on the manufacturer's selling price.

Shri A. T. Sarma: What was the foreign investment on the pharmaceutical products in Japan before the second World War and what is the investment at present?

Mr. Shoichi Inouye: I have figures concerning the number of applications for patents by foreign nationals before the war, but I regret I do not have any figures about foreign investment before the war.

Shri A. T. Sarma: In your memorandum you have stated that by revising the patent law you were able to restrict importation of industrial products by foreign firms. In a similar way we are going to restrict importation of pharmaceutical products into our country by having these sections in our Bill. Do you appreciate our action?

Mr. Shoji Matsui: We have some restriction on importation of some pharmaceutical goods. We can manufacture the same in Japan, but the price is high compared to the price of imported goods. But it is important to protect the domestic industry. That is why we restrict the imports. But the price is high. That is against the welfare of the nation. That is remedied by the Health insurance system.

Shri M. R. Masani: Will you kindly turn to page 10 of the supplementary materials. Table 15 is very impressive in view of the sharp fall in prices of various products that you have listed. I would like to draw your attention to the first three pro-

ducts: penicillin, streptomycin and aureomycin all of which show a fall in price. But penicillin shows a very much sharper fall than the other two where the fall is more moderate. Is there any reason which you can give for this contrast or difference?

Mr. Shoji Matsui: Penicillin business was started just after the World War II by the order of America. At that time regarding penicillin there was no patent existing. Only the know-how was necessary for us. The United States gave the technical know-how to many many pharmaceutical industry. I think more than 50 companies started the business of manufacturing penicillin. Therefore, competition is one of the reasons why there is a very acute fall in the price. From a long range point of view that was a very unhappy position because due to severe competition more than 30 companies went bankrupt. Now the pharmaceutical industry considers that patent protection is very important for sound development of industry. Price competition might result in the appearance of inferior quality product on the market. Then the Welfare Ministry would like to introduce product patent system. One Managing Director of a leading Japanese Company said that the pharmaceutical industry needs product patent system.

Mr. Chairman: Am I right if I say that your patent law is modelled on the American law?

Mr. Shoichi Inouye: No. We set up a Government Council for deliberation of revision of the Industrial property right system. They studied carefully for about four years and

reached some conclusions. The Japanese Government prepared a draft Bill based on the report of that Council and presented it to the Japanese Parliament. It was passed in 1958. The new law was put into effect in 1959.

Mr. Chairman: Could you give us a copy of your current patent law if you have got one?

Mr. Shoichi Inouye: Yes. There are my own personal notes written in this book and if you do not mind it, I will be very glad to give you this.

Mr. Shoji Matsui: If you need some more additional copies, I think, they will be available and we can send them on to you.

Shri R. Ramanathan Chettiar: Also, if you can send us information about foreign capital investments, that will be helpful.

Mr. Shoichi Inouye: We will send you both the information about foreign investments and the copies of the current Japanese patent law.

Mr. Chairman: Thank you very much.

Mr. Shoichi Inouye: On behalf of Mr. Matsui and myself, I would like to express again our deep appreciation for your close attention, patience and indulgence. I hope that what we said today will be of some benefit to your future deliberations at your esteemed Parliament. Thank you very much.

(The witnesses then withdrew).

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1965

Wednesday, the 6th July, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Panna Lal Barupal.
5. Shri Dinen Bhattacharya.
6. Shri Bibhuti Mishra.
7. Sardar Daljit Singh.
8. Shri Basanta Kumar Das.
9. Shri V. B. Gandhi.
10. Shri H. K. V. Gowdh.
11. Shri Kashi, Ram Gupta.
12. Shri Madhavrao Laxmanrao Jadhav.
13. Shri M. R. Masani.
14. Shri Braj Behari Mehrotra.
15. Shri Bibudhendra Mishra.
16. Shri Naval Prabhakar.
17. Shri R. Ramanathan Chettiar.
18. Shri A. T. Sarma.
19. Dr. C. B. Singh.
20. Dr. L. M. Singhvi.
21. Shri P. Venkatasubbaiah.
22. Shri Balkrishna Wasnik.
23. Shri Ram Sewak Yadav.

Rajya Sabha

24. Shri Babubhai M. Chinai.
25. Shri Vimalkumar M. Chordia.
26. Shri P. K. Kumaran.
27. Shri Shyamnandan Mishra.
28. Shri Dalpat Singh.
29. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. The Indian Merchants Chamber, Bombay.

Spokesmen:

1. Dr. R. C. Cooper—*Vice-President.*
2. Shri P. A. Narielwala, *Member.*
3. Shri C. L. Gheevala, *Secretary.*

II. Trade Marks Owners Association of India.

Spokesmen:

1. Shri S. H. Gursahani, *Chairman.*
2. Shri R. A. Shah, *Solicitor.*
3. Shri C. K. R. Rao, *Secretary.*

I. Indian Merchants Chamber,
Bombay*Spokesmen:*

1. Dr. R. C. Cooper—*Vice-President.*
2. Shri P. A. Narielwala—*Member.*
3. Shri C. L. Gheevala—*Secretary.*

The witnesses were called in and they took their seats)

Mr. Chairman: Whatever evidence you give will be published, printed and laid down on the Table of the House and distributed to the Members. Even if you want some portion of it to be kept confidential that will also be circulated to the Members. We have your Memorandum and it has been distributed to all the Members. If you want to add anything you may kindly do so in as short a time as possible.

Dr. R. C. Cooper: Mr. Chairman. at the outset I must say the Committee of the Indian Merchants Chamber is very grateful to you and the members of this Committee for having afforded us this opportunity to appear before you and personally convey to you our views and also emphasise some of the points which we consider more important in our memorandum. As the written memorandum has been circulated I would not like to take the time of the Committee by going over all these matters once again and to pin point the few important issues.

Now the first clause with which we like to deal is clause 53 which deals with the term of the patent. As against the existing period of 16 years, with a provision for extending the period up to 10 years, it is now sought to be provided that in all normal

cases the period will be 14 years but in cases of food, drugs, medicines it will be only 10 years. Our first submission is that there are no very special reasons why this discrimination should be made and we would like to have a uniform period of 14 years for all these items. But if for any special reason the Committee feels that in respect of these items the period should be short; then having regard to special factors there should be provision for extending the period of 10 years by a period not exceeding 4 years so that in exceptional cases the period will be uniform 14 years. The second submission which we would like to make on this clause is that it should be provided in the Bill that the time limit should run uniformly from the time of filing and sealing the patent because our experience is in a large number of cases a period 18 months to 20 months lapses between the date of first application and by the time the details are submitted and the final sealing of the patent. We would like a uniform period running from the date of sealing of the patent in all cases.

The second point which I would like to emphasise is clauses 86 and 87 which deal with the endorsement of the words 'Licences of right'. Here it is provided that in respect of patents for articles of food, medicine or drug, these words would be deemed to be endorsed automatically from the date of commencement of the Act whereas in the case of other articles it can happen only after the expiry of three years and that too if it is proved that there is no non-satisfaction of reasonable requirement of the public. Here again we feel there is not any special reason for making a distinction between this particular category of articles and the other inventions and there should be a uniform policy regarding the licences of right, namely, in every case it should be after 3 years and if the special requirement of non-satisfaction is made out any person can apply for licence. Now, he may not be financially in a position to exploit the patent or he may not have

an efficient machinery. So we feel wherever licences are granted certain conditions should be laid down in the Act. A certain test should be laid-down, certain qualifications should be laid down regarding the financial ability of the person, the technical skill of the person who applies for the licence.

Mr. Chairman: Do you think the Controller will automatically grant the licence without looking into all these various factors.

Dr. R. C. Cooper: Sir, we feel if this test is specially laid down in the Act the Controller will be bound to. We would like it to be spelt out.

The next thing which I would like to deal with is clause 64 of the Bill. Now, Sir, in this clause it is provided that importation into India of a product made abroad by a patented process would constitute knowledge or use in India of the invention on the date of importation and would be a ground on which a patent could be revoked by the High Court on the petition of any person or by the Central Government. Now, Sir, my submission is that before a product under a patented process could be manufactured in this country, it would be necessary to have market and clinical tests as to the usefulness of the product and for this purpose, a token importation will require to be made. Hence where the product is imported for the purpose of reasonable trial or experiment only, such importation should not constitute knowledge or use in India.

Sir, the next clause which I would like to deal with is clause 2(h) which defines 'Government Undertaking' as including the Council of Scientific and Industrial Research and or any University. Our submission is that this definition of the term 'Government Undertaking' is too wide and statutory bodies like Universities and other bodies like CSIR should be excluded.

This is the one suggestion we would like to make and the other suggestion is where even Government Undertaking exploits the patents or imports a patented article for the purpose of commercial exploitation there should be some provision for payment of compensation. It is not there in the Bill. Even under some circumstances the Government may permit an outsider, for certain reasons, to exploit this and the compensation has to be provided for.

The next clause with which I would like to deal is Clause 116. Since a patent constitutes an intangible property every decision of the executive affecting such property should be subject to revision or appeal by either a judicial or quasi-judicial body. We have, therefore, suggested that in respect of such orders or decisions for which no appeal has been provided to the High Court, an appeal should lie to a statutory body like the Copyright Board to be presided over by a High Court or a Supreme Court judge.

The last point with which I would like to deal with is Section 21 of the existing Act in which it is provided that while designs will continue to be binding on Government, patents will not be binding on Government. It can be provided that it will continue to be binding on the Government. But the reading of the new subsection, which is sought to be provided, would convey the impression that it will not be binding on the Government as far as patents are concerned. We would like to say that a uniform practice which prevailed in the past regarding patents and designs should continue to prevail even in the present Bill.

These are my broad submissions. I would be clarifying any points which the Committee may like to put.

Shri Kashi Ram Gupta: Does the Indian Merchants Chamber contain only merchants as members, or does it contain members of other industries also?

Dr. R. C. Cooper: It has very large membership of industries inclusive of drugs.

Shri Kashi Ram Gupta: But you have said nothing about the period of patents of other industries. And the clauses that govern the Drugs industry mainly have been explained.

Dr. R. C. Cooper: In our Memorandum, we have explained everything. Here I have made only some broad points. I thought I will be saving time.

Shri Kashi Ram Gupta: This is the Memorandum, that is, from the Indian Merchants Chamber, dated December 20th. Is it a detailed Memorandum? The clauses here mostly refer to Drugs industry. Therefore, I had raised this point.

Dr. R. C. Cooper: I may clarify that the basic stand of the Indian Merchants Chamber is that a uniform practice should be followed in respect of all types of inventions. And since the Bill itself makes discrimination between the two, we have emphasized that we are against the necessity of making such discrimination.

Shri Kashi Ram Gupta: An important point is this. You have just mentioned that so far as drugs are concerned, four years should be given for certain items if it is thought desirable by the Government. It means you yourself are agreeable to some discrimination.

Dr. R. C. Cooper: No, Sir. In the Memorandum we have said that we are unable to understand the reasons why the Government want to make discrimination. Our basic stand is that there should be a uniform period for every type of industry. That is our alternative suggestion.

Mr. Chairman: That alternative suggestion means that you are agreeable to some sort of discrimination.

Dr. R. C. Cooper: If the Government has any valid reasons for doing so.

Mr. Chairman: Such a distinction is made in other countries. You know that. Then why do you object to this here?

Dr. B. C. Cooper: We find that conditions in India are fundamentally different. For instance, particularly in respect of medicines, we feel that the period of three years will be far too low and it will come in the way of people making scientific inventions; and there can be no proper exploitation of these, because the period is too low. And having regard to the infant stage of industrialization in this country we feel that at least for the time being this distinction is not called for.

Shri P. A. Narielwala: I would like to submit that the position is this. If you want to accept a foreign patent in India—in respect of a drug or anything else—it takes considerable time before, first of all, getting the approval of the Government for a particular industry to be set up with that patent. There are cases and cases, particularly during the last three years, where applications for evolving new processes or new patents have been before the Government for 33 months and 36 months, and no decision has been taken. Now, Sir, you just think of them first. A patent is registered in India, it should be examined and tested clinically before even the Drug Controller would approve of the drug being introduced in India. If a manufacturer wants to manufacture it in India, he makes an application to the Government, which sometimes takes, as I said, up to three years for the Government to decide. You see what is left out of that period. The period for which a particular patent could be accepted in India would be three years. If a manufacturer would wish to accept it, his property rights must be protected. Therefore, we have suggested that the period should be 14 years. If Government thinks that ten years is adequate, certainly there is a case for extension for another four years.

If a product made abroad is to be duplicated here, it may run into snags as a result of clinical conditions or as a result of our technical condition. A particular plant may be suitable in one country, but it may not be suitable in India.

Mr. Chairman: He has also got the right to import and sell it here before he establishes a factory.

Shri P. A. Narielwala: To keep importing is of no consequence.

May I make one more submission? Apart from the foreign patents, I would like the Committee to consider what damage this particular clause will inflict upon Indian patentees? Sir, our scientists are now beginning to produce results. We spend money in our national laboratories. Indian scientists are able to produce goods. Some of them are of patentable nature. Now, Sir, if you are going to impose a limitation on your patents, what is the just possibility of my being able to do this? I give you one more concrete example of a patent with which I am concerned, produced by our Mysore laboratory. I signed an agreement on 15th August, 1960. Today is nearly the 15th August 1966 and we have not yet seen that product because it has taken us years and years to design the plant in collaboration with that laboratory. It is really disastrous for our scientists because at this rate in 10 years time what benefit the Indian scientists could get out of it?

I would strongly urge that this Committee do consider that in this particular matter of food and pharmaceuticals, please do not discriminate. These are new products. And if we wish to see our own scientists develop themselves into really first-class producers of goods and patents, they must be protected against foreign patents.

Shri Kashi Ram Gupta: Are you aware of the fact that a large number

of scientists in this country are of the view that drug patents should be even for lesser period than ten years?

Shri P. A. Narielwala: I would say there are not a large number of scientists. I was present at a conference in Delhi only last January or February, known as Scientists and Industrialists Meeting. I was specially invited by CSIR to take part in the proceedings, and when I made this submission, I got enormous applause, and the scientists asked me to press this point because their position was going to be extremely difficult if they were going to be subjected to this kind of limitation which does not exist anywhere else in the world.

Shri Kashi Ram Gupta: In Bombay there is the Haffkine Institute and Mr. Abraham Patani on behalf of another institute who is going to give evidence. They hold a different view.

Shri P. A. Narielwala: I am quite aware that there are scientists who hold a different view.

Shri Kashi Ram Gupta: How are the two views to be reconciled?

Dr. R. C. Cooper: We are aware of only one isolated case, of a doctor from a Government hospital who has written an article on this subject and made out certain submissions, but against this one solitary case we are aware that there is a very large body of Indian scientists who feel that the Bill in its present form will do great harm to this country's young scientists.

Shri Kashi Ram Gupta: There are two views in the country, one that the period of patent should be from the date of application, and the other that it should be from the date of the sealing of the patent. The Model Law of BIRPI provides that if a country takes to the date of sealing of the patent, the period can be 10 years. They, of course, say 10 years minimum; it means they are agreeable to 10 years to a very large extent.

Shri P. A. Narielwala: The same body has also said at another place that the period of patent should be 20 years, though they have also conceded that if the Government of the developing country feels it necessary it may be 10 years minimum from the date of sealing. That is the submission which our Chamber has also made. If the Committee does not agree to a uniform period of 14 years, then at least 10 years from the date of sealing should be provided with the proviso that if a particular patent requires to be extended, it may be extended by a further four years.

Shri Kashi Ram Gupta: About clauses 86 and 87 you have referred to optical glass, semi-conductors etc. Are you in favour of including these as drugs or you want that these should not be included?

Shri P. A. Narielwala: We certainly do not want any discrimination, and I cannot see for myself how they come under the provision of food and pharmaceuticals. It is something which I just do not understand. May I submit that it should read clauses 87 and 88 at page 7 of our memorandum, and not 86 and 87? It is a mistake.

Shri Kashi Ram Gupta: You have said that in the interests of the scientists of the country, there should be a uniform period of 14 years, but scientists are mostly working in the research laboratories of companies who set aside a certain percentage of their profits for research. It is counted as revenue expenditure and is allowed by income-tax authorities. So, to say that scientists have to be protected does not relate to facts because they are paid by the companies regularly.

Dr. R. C. Cooper: In a developing country like ours where there is abundance of talent available, it will not be correct to say that all kinds of scientific investigation should be through companies only. If the Bill is changed according to our suggestions, it will give a chance to independent scientists to do their work and take

out patents which they can negotiate with others for sale.

Shri Kashi Ram Gupta: Organised research has to be in Government laboratories or undertakings with large resources. Scientists have also given evidence that individuals cannot do much.

Shri P. A. Narielwala: The amount of money Indian industry spends on research as compared to industrialised countries is merely a fleabite. Industries are being urged to form research laboratories or groups of their own, and CSIR has gone out of its way to say that they will meet 50 per cent of the cost of running of such groups, in order to develop research consciousness both in applied and fundamental research. Scientists in the national laboratories who obtain patents have to hand them over to the National Research Development Corporation, a 100 per cent Government owned institution, and the royalty from the patents is to be shared between the laboratory and the National Research Development Corporation, and the amount coming to the laboratory has to be shared between the scientist and the laboratory. So, the scientist does not get the major benefit.

Shri Kashi Ram Gupta: The present Act provides for 16 years, but the scientists in India have not been benefited much during all these years. What is the reason for that?

Shri P. A. Narielwala: Our national laboratories came into existence only after independence. The first was the National Physical Laboratory. In 1950-51, we got the National Chemical Laboratory. Research does not flow from the time you start. Sometimes it takes years; even five, seven or ten years before you hit upon an idea which is of any significant benefit for the development of science and industry. We must not judge the results. I am one of the members on the Board of the Council of Scientific and Industrial Research, and therefore I used to say particularly to the critics

of our national laboratories, "Please give us time; we are working under a great handicap; we are hampered all along the way. Even if I get finance for the national laboratories, you cannot expect that because we spend so much money every year we should produce goods immediately through the process of patents."

Dr. C. B. Singh: I am glad to have your views. About money being spent on research, may I ask you what is the proportion, I mean percentage, on turnover of money spent by your Chamber on research?

Shri P. A. Narielwala: Practically nothing. We have only a research organisation for economic research on which we are spending something like Rs. 75,000 a year, in producing a study on economic problems confronting the country.

Dr. C. B. Singh: With this remark that you are spending practically nothing, what would you consider to be an adequate fund to be spent on research by your Chamber? I mean the laboratories and other concerns, whatever it may be. What will be the percentage, that you would like them to spend for research, on their turnover?

Shri P. A. Narielwala: I can give my personal view. It is this: the industry should spend a minimum of one per cent of its turnover on research.

Dr. C. B. Singh: You know the amount of money that some other countries are spending on research: it is more than 10 per cent or at least five per cent of their turnover. Are you sure that one per cent will be enough here?

Shri P. A. Narielwala: I am talking of the average: I mean an industry, which is not necessarily pharmaceutical or the drug industry. I consider that in India, if we can spend even one per cent on the turnover for research, we will give it a tremendous boost.

Mr. Chairman: Could your Chamber do anything to discipline your members to spend 10 per cent?

Dr. R. C. Cooper: Of late, our Chamber has taken up this matter in right earnest, and one of the important things which we are emphasizing on our industrial members is that the industry has not taken sufficient advantage of the very liberal tax concessions which are provided for scientific research, and more and more use of these concessions which are now available to the industries should be made. This is the plea which we have repeatedly made to them during the last six months.

Dr. C. B. Singh: I am glad of it. You know that the average Indian scientist is not inferior to anyone else, in other countries. You agree?

Dr. R. C. Cooper: Yes.

Dr. C. B. Singh: Then, what is the reason for hardly any real good work, good research work, being done in the national laboratories or universities in India? Having agreed that our scientists are as good as any other scientists elsewhere what is the reason that so far only one thing has been patented? What is the reason that only very little has been done so far? Besides the lack of finance, is there any reason?

Shri P. A. Narielwala: I beg to differ from you. I consider that our national laboratories have produced very good work.

Dr. C. B. Singh: I do not agree.

Shri P. A. Narielwala: That is a matter of opinion. I would say that we have excellent scientists in our laboratories. If you look to each and every laboratory that is functioning, you will find that at the end of the year, they are unable to fill the vacancies by suitable scientists. The CSIR have asked me to sit on the Selection Board, and I have told the Selection Board and the Council that sometimes

not one candidate is suitable for the particular job for which he has applied. So, the posts go on remaining vacant year after year.

Dr. C. B. Singh: You mean to say that suitable candidates are not available?

Shri P. A. Narielwala: Suitable candidates of the calibre for high-grade scientific work are not always available.

Dr. C. B. Singh: You know that more than 6,000 Indian scientists are working outside this country; they are doing better work outside.

Shri P. A. Narielwala: I do not know the number. I take your figure. There are various reasons for it. Maybe that there are not enough opportunities in India for good work.

Dr. C. B. Singh: What are the opportunities that are not available? It is not that our scientists are not there. They are there. If they are not getting the opportunity, why is it so?

Shri P. A. Narielwala: If there are certain Indian scientists who have specialised in missiles, and if we have no work done on missiles, how are they going to come and do the work here? Similarly, there are other physical sciences where we have not developed the work in our laboratories so as to proceed with research. Another reason is that the salaries and pay-scales that we offer to our scientists are totally inadequate.

Dr. C. B. Singh: The main reason to my mind is this: it appears to me and to a large number of Members of Parliament that the director or the man heading these big laboratories or the other people who happen to head these big laboratories—their appointment is open to doubt. We feel that as a result of that, the selection of suitable men and the consequent work suffers.

Shri Kashi Ram Gupta: This has nothing to do with patents.

Mr. Chairman: How can they give an opinion on that?

Dr. C. B. Singh: Now, if the period is extended due to circumstances which are put before the Government—say four years—will it serve your purpose? I mean the period from the time of acceptance.

Shri P. A. Narielwala: Yes.

Dr. C. B. Singh: In para 2, page 1 of your memorandum you have mentioned that the Bill has been brought forward with a view to ensure that patent rights are not worked to the detriment of the consumer or to the prejudice of the trade or industrial development of the country. Unfortunately, you have not mentioned anything about the scientists who have got patent rights.

Dr. E. C. Cooper: In the second paragraph we have said that in our opinion some of the provisions will come in the way of stimulating inventions by scientists and research workers of India and of encouraging the development and exploitation of new inventions for industrial progress. We feel that it will have a deleterious effect on both the sections: the inventors as well as the industry.

Shri M. L. Jadhav: In spite of the low cost of labour in India, the cost of production of pharmaceuticals is high, compared to some of the other nations. Can you suggest ways as to how we can reduce the cost?

Shri P. A. Narielwala: Let us first be clear about one thing. The conditions in India are very different from those abroad. In India if you want a material, you cannot get it readily; you will have certain material or ingredient which has to be imported. If you look at the import tariff schedules, you will be surprised that even the necessary basic ingredients have rates of duties which go up from 47 to 75 per cent or more. Even in respect of capital goods, a highly developed country like Japan, which has built itself up in the last 20 years as

one of the biggest industrial countries of the world, the Japanese delegation which visited India in the beginning of this year told us in categorical terms that in Japan no import duty is levied on capital goods or raw materials. Here on capital goods costing Rs. 1,000, the duty comes to 40 per cent and the cost becomes Rs. 1400. The cost of depreciation also is higher and these would be reflected in the cost of the product. Fantastic duties are levied on the raw materials. Moreover, it is not always correct that Indian labour is cheap. It is a fallacy.

Shri M. L. Jadhav: There is a section of people which thinks that there should be no patent law at all. What is your view?

Shri P. A. Narielwala: We do not support it. That would be disastrous. Even countries which had no patent law till now are now veering round to the view that they should have patent laws to protect their own scientists and their own products. The Soviet Union which has had no patent law has now realised that they should have patent law to exploit the patentable products they are producing and to sell them abroad, and it has decided to join the International Union of Patents.

Shri M. L. Jadhav: Do you agree that the patentees are selling their goods at a higher rate in India as compared to the international price?

Shri P. A. Narielwala: I am not aware of that particular thing. I know a number of patented products sold in India by the manufacturers and I have seen the collaboration agreements. There is a provision that the imported products shall be sold at the international price and that we would get the most favoured nation treatment, if I may say so. That has been the practice certainly in the industries with which I am concerned. May be it is not so somewhere else.

Shri Peter Alvares: I would like to refer you to the clause on licence of

right. Licences of right are given in circumstances where a particular patent is not worked in India. In view of the fact that Justice Ayyangar's report says that the patent law must be cast in a particular national economy, this prevents abuse whereby a patent is not worked here, but the entire product is imported from abroad, lock stock and barrel and it is only labelled here. So, Indian scientists have no opportunity of getting the know-how and technological developments do not take place. In such circumstances, a licence of right is granted so that an Indian applicant may be able to work out the entire patent in India. I thought this provision should have your sympathy.

Shri P. A. Narielwala: We have not opposed the grant of compulsory licensing. We have only said, give him three years' time and if he does not do it, you can go ahead. Even in the existing patent law there is a provision for compulsory licensing. Would the Controller of Patents tell us how many parties have come forward and said, we want compulsory licence to be given for exploiting those patents? Is it in the national economy to produce a product which is imported in very small quantities and to manufacture it at three or four times its imported cost simply for the pleasure of having the product manufactured in India? We as manufacturers realise that we should manufacture a product when there is sufficient need for that product. When a product is manufactured in bulk in one country, to produce it here in small quantities means we shall lose the benefit of the economy of scale, and our costs will be invariably higher. We, as manufacturers, would be reluctant to do so.

Shri Peter Alvares: The conclusion would then be that in most cases the cost of production in India is high and so we should continue importing the products.

Shri P. A. Narielwala: Our industrial development in the last 10 years is a refutation of that theory. There

are demands building up in this country for all kinds of products and the Indian manufacturers are ready to risk their capital when there is a possibility of producing those goods on an economic basis.

Shri Dalpat Singh: At page 3 of your memorandum you have said in regard to clause 48 that universities and scientific research institutions should not be included under the definition "Government Undertaking". Why?

Dr. R. C. Cooper: We are going by the definition of Government Undertaking and we feel that universities and bodies like the CSIR being statutory bodies having a separate identity should not be included.

Shri P. A. Narielwala: Some of the CSIR laboratories produce goods for sale. You will understand that if they are allowed to take over a patent without paying any compensation, it would be an erosion into the property rights of a patentee.

Shri Dalpat Singh: What objection do you have for including bodies doing research?

Shri P. A. Narielwala: For research we do not object. We only say that a university should not be included as a Government Undertaking. A Government Undertaking would be a factory like the one at Pimpri. I am surprised that universities have not protested against their being called Government Undertakings.

Mr. Chairman: It is only for research that they want these things.

Shri P. A. Narielwala: For research, we do not object. We have said nothing against national laboratories for doing research.

Shri A. T. Sarma: Foreign witnesses say that if this Bill is passed, foreigners would not invest their money here and would not open factories in India. Is it correct?

Dr. R. C. Cooper: As far as I have been able to understand, the argument

of these people is that against the profits which are made here they are incurring exceedingly large expenditure on research by their parent organisation and since the benefit of this research is available to India a certain proportion of that research expenditure has to be allocated to India. This is the answer which they are giving again and again to the charge made against them of their making huge profits and the consequent necessity of amending the patent law.

Shri A. T. Sarma: May I know whether the non-investment of foreign capital will adversely affect our research and industrial development?

Dr. R. C. Cooper: To a certain extent, it may, till such time as the indigenous research has developed to that extent.

Shri A. T. Sarma: The foreign companies have stated that the Indian Parliament is taking a backward step by proceeding with this enactment. Do you agree with that view?

Dr. R. C. Cooper: We also agree that if the Bill is passed in its present form it may be a retrograde step in the sense that Indian Industry and Indian scientist will suffer.

श्री चौरङ्ग : आपने कहा है कि एन्जीनेयर्स के डिपोजिट में काफी समय लग जाता है और यह जो सोलिंग पीरियड है, इतको कम किया जाए। इतको कम करने के क्या आप कोई सुझाव दे सकते हैं ?

Dr. R. C. Cooper: These are the usual procedural delays of Government departments. If the delays could be otherwise independently curtailed, then automatically the period of ceiling will be earlier and it will start from an earlier date. It is entirely a matter of administration and perhaps the Administrative Commission will have to look into it.

श्री चौरङ्ग : एडमिनिस्ट्रेशन वाले तो नियमों के अनुसार काम करते हैं। ऐसी स्थिति

में क्या आप कुछ नियमों में भी फर्क करना चाहते हैं ताकि नियमों के अन्तर्गत काम करते रह कर भी काम जल्दी से हो सके ?

Dr. R. C. Cooper: I do not know to what extent it will be possible to provide that there should be a definite time limit beyond which an application cannot be kept pending, because I do agree that there will be practical difficulties from both ends. In certain circumstances, for valid reasons, there may be delay. But if it is from the date of ceiling I feel it will be fair to the industry.

श्री चौरङ्ग : आप ने कहा है कि पेटेंट का जो पीरियड है वह पर्याप्त होना चाहिए चौदह साल या सोलह साल। परन्तु क्या आपको यह भी पता है कि विदेशी कम्पनियों ने जो पेटेंट एक्वायर कर रखे हैं उनकी इंटरनेशनल मार्केट प्राइस सामग्री कम है और हमारे यहां पर बहुत ज्यादा है ? मैं आप उदाहरण देता हूँ। टोल्यूएनाइड होचस्ट को यूरोपियन कंट्री में ट्रेड प्राइस 1.85 डालर है जबकि हमारे यहां पर 3.57 है। इसी प्रकार से क्लोरोफो फ्लोरपेमाइड की इटली में प्राइस 1.41 डालर है जबकि हमारे यहां पर चार डालर है। पेटेंट को बजड़ से ही हो सकता है कि वे ज्यादा हम से लेते हों। इसको रोकने के लिए आपका क्या सुझाव है ?

Shri C. L. Gheevala: May I make a submission? The prices of products in international markets where there is piracy of patents cannot be controlled. Italy is one country where there has been no patent law where a large number of products have been produced and sold. It is on record in Italian Parliament itself that the products sold are sub-standard in some cases and the internal price of that product in Italy is as high as the price of an imported product but for purposes of exports they are selling at very low prices and that in many countries the products from Italy are

now banned. What is more significant is, in the absence of patent laws in Italy, their scientists have gone out of Italy to register their patents. Is it not a national loss that the patent benefits which should flow into Italy go to the Italian scientists who remain outside Italy, where they have accumulated foreign exchange by exploitation of the patents? Those patents are registered all over the country except Italy. I think we should avoid that kind of situation in India. Even Italy has now drafted a Patent Bill which is now before the Italian Parliament to come into line with the patent laws of other countries.

श्री चौरङ्गिया : आपने अपने मैमोरेण्डम में सुझाव दिया है कि पेटेंट का जो बंधन है वह शासन पर भी लागू हो। हमारे यहां प्रजातंत्र है। प्रजातंत्रीय सरकार जनता के अहित में काम करे ऐसी कल्पना नहीं की जा सकती है। ऐसी स्थिति में कानून से विशेष कारण हैं जिनको वजह से आप यह सुझाव देते हैं कि शासन पर भी पेटेंट के नियम लागू होने चाहियें ?

Dr. R. C. Cooper: Since today the Government is operating in the public sector, we feel that whenever Government operates in industry or business it should be in the same terms as the private sector. For instance, there are at least three drugs we are aware of which are being produced by Government factories, which are all unpatented articles where the prevailing market price in different countries is less than Rs. 50. Those drugs are being sold by Government factories at more than Rs. 4,000.

Shri C. L. Gheevala: May I also point out another instance? In Pimpri they have invented a fungicide which they are now trying to exploit in foreign countries. You will be surprised to know that they have asked

for a royalty of 7½ per cent for allowing this product to be exploited, whereas the present Bill provides only for 4 per cent. They have run into heavy weather because of this provision in the Bill. The foreigner who wanted to exploit this product turned round and said: when your own Government fixes 4 per cent, how could you ask for 7½ per cent. So, we must be prepared to face these repercussions. Then we have to consider how the Indian scientists and industrialists will suffer because of the provisions of the Bill. We are anxious to protect our own Indian interests. We are not interested in protecting foreign patents or foreigners. We want to protect our own scientists, scientific workers and industries so that they can produce patentable products.

श्री चौरङ्गिया : आपने अपने उत्तर के दौरान में रून का उदाहरण दिया है और कहा है कि वहां पर भी कानून बना कर उनके अधिकारों की रक्षा करना चाहते हैं, उनके अधिकारों को सुरक्षित रखा चाहते हैं। आप जानते ही हैं कि पहले वहां के लोगों ने कोई पेटेंट का कानून नहीं रखा था। पहले पहले पेटेंटिड प्रोडक्ट्स का रूप ने निर्माण किया तो नकल उनकी उसने की। बाद में कुछ संशोधन किये। आज कई वर्षों के बाद वह इस स्थिति में आया है कि वह स्वयं नई खोज करके नए नए प्रोडक्ट्स पैदा कर सके। ऐसी स्थिति में भारत में साइंटिस्टों को भी इस दान का अन्वसर क्यों न मिले कि पहले तो वे दूसरों की नकल करके कुछ सीखें और फिर अपनी अकल लगा कर संशोधन करके नए उत्पादन करें। इसमें का.को क्या आपत्ति है ?

Dr. R. C. Cooper: The fundamental question which has to be realised is that the pattern of Soviet economy is completely different from the pattern of Indian economy. We are not operating in a closed economy. So, what may be good for Russia may not necessarily be good for India. It is my firm conviction that it will be very

harmful if no patent law existed in this country.

Shri C. L. Gheevala: May I supplement this observation by saying that in some of the industries, particularly the pharmaceutical industry, we must realise the fact that our scientists are of the view that they are as good as Russian scientists. For instance, in the case of the anti-biotic plant at Haridwar with Soviet collaboration the knowledge and know-how they have offered to give us is very inferior to what we ourselves have developed and, in fact, we have accepted this for political reasons. We are hoping, our scientists are looking forward for the day, when they can tell Soviet Union that their services are no longer required and that we will produce those products our own and improve upon them because we know how we can improve with our own knowledge of the subject.

Shri R. Ramanathan Chettiar: On page 9 of your memorandum you have stated:

"My Committee suggest that there should be no ceiling on the royalty payable and the amount of royalty be determined in each case with reference to the facts of the case and the Controller may be empowered to fix the royalty after taking into account the various circumstances of the case."

You suggest that there should be no ceiling. In the present Bill we have put a ceiling of 4 per cent. You have given the example of one collaborator asking for 7½ per cent and a lot of hullabaloo about it. Should we agree to exploitation by foreign interests in the field of drugs and pharmaceuticals in this country?

Let me quote an instance here. You would have seen the November, 1964 Bulletin of the Reserve Bank of India. In that it is mentioned that in 1962-63, the total investment of group of foreign firms in the pharmaceutical and drug industry was of the order of Rs. 14 crores and that they have taken

by way of dividend, etc. about Rs. 2 crores and by way of royalty Rs. 5 crores. That means 50 per cent of the total investment has been repatriated to their countries in one year. So, if we accept this and have no ceiling, that means it will lead to further exploitation of our country. Already, our country is a very poor country and there is exploitation by drug manufacturers and distributors in respect of life-saving drugs to the detriment of our people. After all, as you would rightly accept, the life-saving drugs and other medicines should be within the reach of poorer classes of people. Today, some of the life-saving drugs are not able to find its way to the poorer homes. Don't you think this will act against that objective?

Dr. R. C. Cooper: Let me clear out some of the misunderstandings in this matter. The first thing which I would like to point out is that we are ourselves trying to collect data on these royalties and we have found that of late the actual royalty percentages have very considerably come down and today they are very much nearer the figure of 4 or 5 per cent which is sought to be provided in the Bill. We are, however, asking for a certain amount of flexibility only because there may be some exceptional items where this kind of rigidity may come in the way. Our enquiries reveal that mostly the pattern of royalties is very near the figure which the Government is contemplating. We are suggesting the removal of the ceiling only for the purpose of ensuring flexibility.

The other misunderstanding which I would like to clear is this. The Reserve Bank's figures are gross figures of royalties which accrue to the foreigners. We have got to appreciate that the tax rate which operates here varies from 55 to 70 per cent with the result that a considerable amount of this revenue comes to the Government of India. It is only the net amount, after the payment of tax which varies from 55 to 70 per cent, that the foreigner takes away. I am myself con-

cerned with many of the pharmaceutical concerns as an auditor and I know the net amount which they are able to take away from here after paying the tax.

Shri R. Ramanathan Chettiar: You are forgetting that we are having double tax relief in some of the countries to which this money is repatriated.

Dr. R. C. Cooper: The principle is that since a company is a non-resident company here, the double taxation benefit, in the absence of agreements in most countries is given at the other end. That is at the expense of the foreign Government and not at the expense of our Government. Even in countries like U.K. and U.S.A. we have not got the double tax relief. In the absence of agreement, the double tax relief has to be given to the company which is resident.

Shri R. Ramanathan Chettiar: The amount of Rs. 2 crores is the dividend. How can it be a gross amount? It will be after payment of the taxes here. No dividend is paid before taxes are paid to the Government.

Shri C. L. Gheevala: When a company declares a dividend, the dividend, first of all, is subjected, at the hands of the receiver, to the repayment of 20 or 22 per cent. If the dividend is Rs. 10, actually I will get only Rs. 8 or 7, whatever it may be. The foreigner, having got that, has then to pay the income-tax on the dividend that he has received which, as Dr. Cooper pointed out, varies from 55 to 70 per cent. Out of the amount of Rs. 8 which the foreigner has received as the dividend, actually he can only remit Rs. 2.50 p. or Rs. 3.

Shri R. Ramanathan Chettiar: Even then, for an investment of Rs. 14 crores the dividend is Rs. 2 crores.

Shri C. L. Gheevala: May I make one other submission? In a free economy, I can understand some kind of a ceiling being provided. But in our

country, where we have a planned economy and particularly where there is foreign collaboration and foreign exchange is to be remitted, we have to go to the Government of India and the Reserve Bank for the approval of the terms. What purpose is served by putting a ceiling? I may tell you that the Government of India's Technical Development Department Wing which is competent to assess the merits of a particular produce have themselves in some cases suggested a lower royalty of 2 or 3 per cent and the foreigner has accepted it if he knows that the product is likely to be fully exploited.

Another thing which I would like to mention is that in many of the pharmaceutical companies with foreign collaboration, you will notice that the majority capital is with them, either 50 per cent or 60 per cent or even 70 per cent. In the latest issue of Pfizer which was made public the other day, you will notice that 70 per cent of the capital is still held by foreigners. What purpose does it serve by putting a ceiling? We are only creating an unnecessary apprehension in the mind of anybody who is going to use the patent. He is going to be governed by our own laws and by our own assessment of the value of a particular product and whether it requires any royalty or it does not require any royalty. What purpose does it serve by putting a ceiling?

Shri R. Ramanathan Chettiar: I can understand your taking exception to the low rate of 4 per cent.

Dr. R. C. Cooper: We are not taking exception to the low rate of 4 per cent. We concede and are aware of a large number of agreements in the pharmaceutical field itself where the percentage is less, that is, 3 or 2 per cent. We are against a rigid ceiling which may come in the way of genuine cases because of this statutory limitation. That is why we would like to have flexibility.

Then, the figure of Rs. 2 crores of the Reserve Bank does not take into account the large amount of expenditure on research, the overheads, etc., incurred at the other end which is rightly allocable against the royalty payment. Our income-tax laws have conceded that where a foreigner receives a royalty here, he is entitled to a proportionate relief for the expenditure on research, overheads, etc. incurred at the other end.

Shri C. L. Gheevala: Today, in our country, in certain fields, we are extremely ill-provided. I am not talking of the pharmaceutical industry. I am talking of the field of electronics. As you know, the Bhabha Committee has made a recommendation that in the next 10 years, there should be an investment of Rs. 150 crores if we wish to develop the electronics industry and put ourselves on the electronics map. This is a very highly specialised and highly technical field. It is quite conceivable that with the new developments of electronics, it may become necessary to pay even more than 4 per cent and go even upto 10 per cent.

Shri K. V. Venkatachalam: 4 per cent does not apply to any other area except the drugs industry.

Shri C. L. Gheevala: I am sorry. I did not realise this. Then, I will not pursue this.

Shri B. K. Das: You have discussed in your Memorandum the matter regarding payment of compensation for government use. For experimental research, including imparting of instructions, you are agreeable that compensation may not be given and also in cases where there are emergencies involving the security of the country, you are agreeable that compensation may not be given. But do you not think that there are other grounds also on which compensation may not be paid, for instance, for government use in hospitals and other things, compensations may not be paid;

government may make use of it for public welfare.

Shri P. A. Narielwala: The question is a very wide one. Are you thinking in terms of Central hospitals or State hospitals? We are continuously expanding our hospitals. Is it fair that government should have the right to manufacture a patented product without paying the owner the necessary compensation? What I am trying all along to explain and impress upon this Committee is that we are not trying to have two laws—one for foreign patentees and one for Indian patentees. Indian patentees would also suffer in this manner. I am trying to protect the Indian research worker, the Indian scientist. If he can manufacture this product and sell it to government departments or to hospitals, why should he be prevented from doing so? Government say, "we will exploit this patent and you have no right for any compensation." I think it is totally unfair that I should be asked to give the benefit of my knowledge to the State without any kind of compensation, to supply hundreds and thousands of hospitals in this country. We have ourselves stated that, in national emergencies and for Defence requirements—certain urgent requirements—we may make some exceptions, but to give a general blanket licence to government means that it will be utilised and fully exploited by government for all kinds of purposes even when it does not serve any national interest.

Shri B. K. Das: Government may also like to import, if necessity arises.

Shri P. A. Narielwala: The same principle arises. If it is a patented product, government imports it directly and not through the patent owner. If it is imported through the patent owner, he will naturally ask for some compensation. What you are trying to do is this: the Indian High Commission London,—Purchasing Mission—will buy the product in England and bring it here. I think it is unfair.

Shri B. K. Das: They were restricting it to particular cases.

Shri M. R. Masani: I have found the evidence most convincing and impressive and have, therefore, nothing to ask.

Shri V. B. Gandhi: In the first place I agree that there should be flexibility in the matter of rate of royalty payable. Perhaps the idea that Government had in mind in bringing in this measure with a fixed royalty was that, in private negotiations between foreign collaborators and Indian industrialists, sometimes a fixed royalty expressed in the Bill would help to keep them firm. Do you think that there is any truth in that?

Dr. H. C. Cooper: Wherever any foreigner is involved as a recipient of royalty, the agreement is subject to governmental sanction in any case and both the parties, according to government policy, are fairly clear in their minds as to what is permissible. So putting an additional ceiling in the Patent Act itself will not help because that is taken care of independently. On the contrary, it will create hardship in a few genuine cases.

Shri V. B. Gandhi: I have said that I agree with the principle of flexibility.

Dr. L. M. Singhvi: cannot resist the temptation of asking questions notwithstanding the fact that the evidence is very clear, concise and comprehensive.

I would like to know in particular whether it would be more in consonance with the evidence tendered by the witnesses that "licences of right" should be abolished altogether.

Shri P. A. Narielwala: If you wish to abolish it, the business community would welcome it; the industrialists would welcome it.

Dr. L. M. Singhvi: It seems that certain suggestions made in respect

of provisions relating to "licences of right" have been made only as a second string to the bow because the whole argument—and the tenor of the evidence—has been that "licences of right" should be merged into the larger category of compulsory licences, if there is any need, but "licences of right" as such as a distinct category should not be allowed to exist in this enactment. Is that the position?

Shri P. A. Narielwala: Yes; that is the correct position.

Dr. L. M. Singhvi: May I know whether it would be correct and fair to say that your Association generally agree with the recommendations of the Ayyangar Commission, particularly in respect of the term of the patent?

Dr. H. C. Cooper: We are broadly in agreement with most of the recommendations.

Dr. L. M. Singhvi: I would like to know whether the uniform term for all inventions is a useful thing or whether certain distinction should be made in respect of food, medicines and other things, mainly on the ground of interest of the community. If the opinion of the witnesses is that there should be uniform provision and no differentiation should be made, would they amplify the reasons that they have given?

Shri P. A. Narielwala: We think that there should be uniformity, whether it is pharmaceutical or food or any other patent. We have said that, in our opinion, a patent should be given for a period of 14 years. We have merely made this suggestion to the Committee and if the Committee does not approve of this suggestion, then we will put up an alternative—I may say here that it is only an alternative: allow the patent right for ten years after the sealing of the patent and then leave it to Government; give the Government flexibility, the option, the provision to extend it for a fur-

ther period of 4 years. We are not suggesting the present provision where the patent is for 16 years and then there is provision for extending it by five years and then by another five years, so that the patent may run for 26 years. 26 years seem to us to be a long period. But 14 years in the conditions in which we operate in this country under a planned economy, does not seem to us to be too long.

Dr. L. M. Singhvi: Then you give us the maximum and the minimum periods taken in the registering a patent.

Shri P. A. Narielwala: Our information is that the minimum period is 18 months and the maximum period is two years.

Dr. L. M. Singhvi: In respect of Clause 112, which says that no injunction shall be granted against him, you have suggested that the word "shall" should be substituted by the word "may" so that the Court can go into the question and come to an impartial judicial decision. I do not find his consistent. Could you explain whether, as a matter of fact, the substitution of the word "shall" by "may" would necessarily enable the Court to go into the question and to come to an impartial judicial decision, as you say in the Memorandum? Because whether the Act says that no injunction may be granted against him or it says that no injunction shall be granted against him, both should be read exactly in the same manner.

Dr. H. C. Cooper: What we would like to see is that the authority of the Courts should not be taken away and our amendment is only to see that the authority of the court is restored.

Mr. Chairman: It has come to our notice that courts take very long time to dispose of cases. In such a case will you be satisfied with a special Tribunal competent to dispose of these cases.

Dr. H. C. Cooper: We have suggested a Tribunal for executive acts. But I am aware of at least one case in which we ourselves pleaded for Companies Tribunal under the Companies Act for certain things, and it should be presided by a High Court Judge. Now we find that the rate at which the Tribunal is disposing of cases is much slower than the Court of law.

Mr. Chairman: We may also prescribe a period for the disposal of cases.

Dr. H. C. Cooper: If some such machinery can be evolved and the period is shortened, we would very much welcome, but our experience is the contrary.

Dr. L. M. Singhvi: Clause 116 adumbrates two categories. In one case there shall be no appeal at all; in the other case, under certain specific sections, an appeal shall lie to the High Court. You have suggested that in the first category there should be an appeal to a statutory body like the Copyright Board. Would you rather not have a uniform provision in both the cases for an appeal to the High Court rather than create a bifurcation of jurisdiction—one the High Court and the other a Tribunal a nalogous to the Copyright Board?

Dr. H. C. Cooper: We have made this suggestion looking at from two viewpoints—one from executive matters and the other is from technical matters. Even if the matter went up to the High Court, there may be a necessity of having assessors appointed and the matter might be quite complicated. So we thought in such procedural and executive matters perhaps the Tribunal will be more helpful. Secondly, as the Chairman himself has said, there occurs delay in disposal of cases by courts.

Mr. Chairman: Suppose we give the right of appeal only on points of law to the Supreme Court, would you be satisfied?

Dr. H. C. Cooper: That is the procedure under the Income-Tax Act.

To our knowledge it has been working very satisfactorily.

Shri P. A. Narielwala: Whether you have a Tribunal or High Court, the Judge who sits on it must be really a competent person and a specialist in patent cases because the patent law is a very complicated matter.

Mr. Chairman: We may make sure that the Judge appointed is a competent person.

Shri P. A. Narielwala: He should really be an expert in that.

Mr. Chairman: He should be a specialist Judge.

श्री अचल सिंह : आप जानते हैं कि हमारे देश की नब्बे प्रतिशत जनता गरीब है। इस स्थिति में क्या आप कोई ऐसा सुझाव देंगे, जिससे जनता को दवाइयाँ, ड्रग्स और इन्जेक्शन वगैरह सस्ते दामों पर मिल सकें ?

Dr. H. C. Cooper: We have already answered this question earlier that we do recognize that having regard to the conditions in our country, pharmaceutical drugs should be available at a reasonable rate. But we feel that the way in which the Bill is cast will do harm in certain other quarters and not try to achieve that objective.

Shri P. A. Narielwala: Let me also supplement this information by telling this Committee that in the last few months everyone, including the Drug Controller has asked the Industry to hold the price line. The example of Pimpri is not a satisfactory example for the industry. The price of streptomycin which is produced by Pimpri has in the last three months been increased instead of being reduced. As you know, even in penicillin produced at Pimpri because it is their monopoly, the price of penicillin in India is higher than what it is anywhere else in the world. Pimpri with very good profits which it makes can

justifiably reduce its price of antibiotics if it is to serve the purpose which the hon'ble Member has in view.

Sardar Daljit Singh: Have you got any patent in foreign countries?

Dr. H. C. Cooper: Some of the industries do have patents of a few products in foreign countries and our information is that this tendency is now increasing day by day.

Shri P. A. Narielwala: The National Research Development Corporation will give all that information that you have asked for, the number of patents for products of Indian origin that they have patented in the market in foreign countries, etc.

Sardar Daljit Singh: You have mentioned that there should be a Board on the lines of the Copyright Board for appeal against the decision of the Controller.

Mr. Chairman: He asked this question and he has just now answered it.

श्री प० ला० बाबूपाल : मैं यह जानना चाहता हूँ कि विदेशों से मंगाई जाने वाली दवाइयों के मुकाबले में भारत में बनने वाली दवाइयों की क्या स्थिति है और इन दोनों प्रकार की दवाइयों की प्राइस में क्या अन्तर है।

Dr. H. C. Cooper: We will not be able to answer this question offhand in the absence of the immediate availability of statistical data here. But we could give this information

श्री विभूति मिश्र : मैं यह जानना चाहता हूँ कि आप पेटेंट के पक्ष में क्यों हैं।

Dr. H. C. Cooper: We are on the side of national interest; we are not on the side of patents as such.

श्री विभूति मिश्र : आप जानते होंगे कि हिन्दुस्तान में योगराज गुग्गुल को शागंघर

या भावप्रकाश के फ़ारमूला से बनाया जाता है। यह दवाई गठिया आदि रोगों में प्रयुक्त की जाती है। हिन्दुस्तान में हर जगह वैद्य फ़ैले हुए हैं और वही वैद्य सफल होता है, उसी की प्रैक्टिस चलती है, जो ठीक विधि से और रोगी के लिए लाभकारी दवाई तैयार करता है। अगर पेटेंट की व्यवस्था हो जायेगी, तो एक ही आदमी को एकाधिकार हो जायेगा—चाहे वह अच्छी दवाई दे और चाहे ख़राब दवाई दे। इसलिए पेटेंट की व्यवस्था देश की 45 करोड़ जनता के लिए हितकर नहीं होगी। जैसा कि मैंने कहा है, आज योगराज गुग्गुल को शार्गंधर या भाव-प्रकाश की फ़ारमूला से बनाया जाता है। आज उसका कोई पेटेंट नहीं है। इस प्रकार की दवाइयों का पेटेंट करने से जनता को बहुत परेशानी और हानि होगी। आप इस बारे में अपने विचार बताइये।

Dr. H. C. Cooper: In respect of some of these indigenous medicines the situation is that they make an application for patent. They disclose the particulars but the basic formula is never disclosed at all.

Shri P. A. Narielwala: You know in Ayurvedic medicines each Vaid has his own particular formula. He should take the responsibility of obtaining the formula and perpetuate the protection of the Ayurvedic drugs in the country. There is no formula. You have to sit down and persuade the Vaid to disclose his formula where he is given the patent protection.

Mr. Chairman: Some of them are publishing the ingredients.

Shri P. A. Narielwala: Very few. After all in the Ayurvedic and Unani systems, the Vaid gives the patient something saying, 'You take this and you will get cured.' What it is you do not know. In fact in the Central Medicinal Plant Organization of which I have been the Chairman, we

have more than once asked them, 'Please identify this product because it is used in Ayurvedic medicine' and we have invariably found that when I talk of medicinal plant product, that plant does not exist any longer or does exist but there are some variations of that plant and that it is difficult to identify which of that particular plant is the one which is used in the Ayurvedic medicine. I can give you instances of that.

श्री विभूति मिश्र : चेयरमैन साहब, यह योगिराज गुग्गुल का फारमूला उस पुस्तक में लिखा हुआ है कि फलां दवा इतनी, फलां दवा इतनी। वैद्य इसको लिख देता है। जो रोगी होता है वह उन दवाओं को खरीद कर लाता है। वैद्य उसका इंस्पेक्शन करता है। कहता है कि अमुक दवा खराब है, इसको बदल कर लाओ। फिर उसके सामने दवा बनायी जाती है और योगिराज गुग्गुल बड़ी मशहूर दवा है और उसी वैद्य की चलती है कि जो अच्छी तरह से बनावे। लेकिन इनका फारमूला तो सीक्रेट रहता है। हिन्दुस्तान में किसी दवा को पेटेंट कराया तो 45 करोड़ आदमियों के लिए उसके पास ऐसा संगठन होना चाहिए और फिर मसानी साहब तो वह दवा खरीद कर खा सकते हैं क्योंकि धनी आदमी हैं लेकिन आम जनता जिसकी 20 रुपये 25 रुपये मासिक आय है वह नहीं खरीद सकती है। पेटेंट करने से आप उसे एकाधिकार देते हैं तो आप पेटेंट के पक्ष में क्यों हैं। इसलिए हैं कि आप पूंजीपतियों को बढ़ावा देना चाहते हैं।

सभापति महोदय : पेटेंट एलोपैथिक मेडिसिन्स के लिए है, आयुर्वेदिक के लिए नहीं है।

श्री विभूति मिश्र : आयुर्वेद का वैद्य जब कोई दवा बनाता है तो जनरल सिद्धान्त उसका है, जिसके अनुसार वह उसका एक सर्टेन पोर्शन फ्री डिस्ट्रीब्यूशन के लिए रखता है। अगर एक सेर बनाये तो उसका 10

प्रतिशत या 15 प्रतिशत खैरात के लिए रखता है। तो क्या पेटेंट वाले दवा बनायेंगे तो उसमें कुछ ऐसा है कि इतनी दवा बनाकर इतना उसका पार्श्वन खैरात करेंगे। दूसरी बात, हिन्दुस्तान का फ.रेन एक्सचेज जूट ग्रीन्डर, टी ग्रीन्डर और टेक्सटाइल ग्रीन्डर यह तीन पैदा करते हैं जिसमें गरीब आदमी ज्यादातर जूट पैदा करते हैं। तो मैं यह जानना चाहता हूँ कि कोई ऐसी दवा हिन्दुस्तान में पेटेंट हुई है कि जिसमें बाहर से उसका कोई सामान न मंगाना पड़े।

Dr. H. C. Cooper: There are plenty of such things . . .

Mr. Chairman: We will discuss it among ourselves.

Shri P. A. Narielwala: We are not representatives of the pharmaceutical industry to answer these questions. But the Hon'ble Member should know that in the jute industry, in the textile industry, tea industry, in every industry, medical facility is provided freely by the companies concerned to the workers.

श्री विभूति मिश्र मैंने पूछा कि कोई ऐसी दवा है कि जो हिन्दुस्तान में पेटेंट करायी गयी हो और जिसमें बाहर से कोई दवा या सामान न मंगाना पड़ा हो।

Dr. H. C. Cooper: The answer is in the affirmative.

Shri Kashi Ram Gupta: Give examples.

Shri P. A. Narielwala: As we are not representatives of the pharmaceutical industry, we do not have this information. If you want we can find out from the pharmaceutical industry.

Dr. H. C. Cooper: Penicillin itself is an example which the Hon'ble Member wanted.

श्री विभूति मिश्र : आप विटनेस देने यहां आये हैं और आप कहते हैं कि इसका

जवाब आपको मालूम नहीं है। मैं जानना चाहता हूँ कि कौन कौन सी दवा ऐसी है जो कि हिन्दुस्तान में पेटेंट हुई हो और हिन्दुस्तान में ही उसका सारा सामान मिला हो, बाहर से न मंगाना पड़ा हो।

Shri P. A. Narielwala: Only on Sunday last, Dr. Venkataraman, former Director of the National Chemical Laboratory gave an example of Vitamin C, a process for the production of which was evolved by our own Scientists at the National Chemical Laboratory from Indian raw materials. He gave a pathetic story of how the process, which is patented, which was offered first to the Hindustan Antibiotics for exploitation, has not yet been utilised, owing to constant changes in the post of Managing Director. It comes up and then it is withdrawn because the next Managing Director does not like it. I say this with his knowledge; I don't think what he said was confidential. But this is a fact. A product evolved by our own scientists from our own raw materials is not being utilised or exploited. Substances like penicillin; Vitamin B12, Vitamin A, etc., which are now made in this country are basically from Indian raw materials. I think now they are going to start again on Vitamin C.

श्री विभूति मिश्र : क्या आप चाहते हैं कि कोई दवा का आविष्कारक अपना आविष्कार किसी इंडस्ट्रियलिस्ट के हाथ बेच दे तो बेचने के बाद जो दवा तैयार होती है उसमें कितना खर्च होता है, कितना उसका मुनाफा हो, इन सारी चीजों के जांच के लिए कानून में कोई धारा होनी चाहिए ताकि उसके अनुसार उसकी कीमत ठीक ठीक निश्चित की जाय जिससे देश के इंडस्ट्रियलिस्ट्स को भी कुछ फायदा हो जाय और गरीब जनता को भी सस्ती दवा मिले।

Dr. H. C. Cooper: We have no information in our possession to answer these questions.

श्री राम सेवक यादव : अभी चौरड़िया साहब के प्रश्न का उत्तर देते हुए श्री नारीवाला ने कहा था कि जितनी बिक्री होती है उसका एक प्रतिशत खोज पर खर्च होना चाहिए और अभी यह भी उन्होंने कहा कि हिन्दुस्तानी साइंटिस्ट को खोज से प्रोत्साहन मिले इसलिए पेटेंट कानून की आवश्यकता है। मैं जानना चाहूंगा कि जो एक प्रतिशत खर्च की वह बात करते हैं उससे उनके वेतन के अतिरिक्त और क्या मिलने वाला है।

Shri P. A. Narielwala: Sir, this is a matter which must be determined by the industry itself or by the industrial company where the scientist works. There is an agreement between the scientist and his board that if he evolves a patent and that patent is exploited by the company, the scientist shares either in the form of a recurring royalty or in the form of a lump sum.

श्री राम सेवक यादव : क्या अब तक हिन्दुस्तानी साइंटिस्ट ने किसी नयी चीज का आविष्कार किया और उस आविष्कार से जो फायदा हुआ उसमें से उनको कुछ मिला ?

Shri P. A. Narielwala: Very many scientists are benefiting. The Council of Scientific and Industrial Research or the National Research Development Corporation will tell you how much of the money has been given to scientists.

श्री राम सेवक यादव : उनको वेतन के अलावा क्या मिला यह मैं जानना चाहता हूँ।

Shri P. A. Narielwala: I can't give this information. The Chamber has not got this statistical information.

श्री राम सेवक यादव : दूसरा सवाल है मेरा कि आपने एक प्रश्न के उत्तर में कहा कि इटली में पेटेंट कानून के अभाव में दवायें रही बिकती थीं तो क्या यह समझा जाय कि पेटेंट कानून अगर हो तो वही काफी है दवायों

को ठीक रखने के लिए; और दूसरे कानून की आवश्यकता नहीं है।

Shri P. A. Narielwala: Sir, if there is a control on the medicine as a result of patent specifications, then the manufacturer will be governed by the particular rules and regulations. He can't steal the patent and try to produce. He tries to produce according to his method, but it may turn out that he does not have the technical know-how. The patent indicates broadly temperature, pressure, etc. But it does not indicate exactly what is the exact temperature and pressure in which to operate. Therefore, invariably it would result in sub-standard drugs. We have this experience in our own Indian industries.

श्री राम सेवक यादव : आपके कथनानुसार पेटेंट से आविष्कार और टेकनिकल नो हाउ को प्रोत्साहन मिलेगा तो मैं जानना चाहता हूँ कि इससे उन्हीं देशों को फायदा होता है कि जहाँ खोज ज्यादा तेजी से चल रही हो और जिन देशों में खोज पर ज्यादा पसा खर्च नहीं होता उनको नुकसान होता है।

Shri P. A. Narielwala: I do not see how we are competent to answer that question whether there is loss or gain. We are trying merely to protect our own scientific workers against the rigor of a Bill as drafted. We want to see that the Indian research develops quickly so that our own men produce a range of patented products. It will be seen that over the period of years, the number of Indian patents is gradually increasing as compared with what it was 10 years ago. That is an information which I think the Controller of Patents will give you.

श्री राम सेवक यादव : इस देश में आविष्कार और टेकनिकल नो हाउ की जानकारी बढ़े और नये आविष्कार हों इसके लिए क्या आप जल्दी समझते हैं कि आविष्कार करने वाले वैज्ञानिकों को वेतन के अतिरिक्त

अगर किसी नयी चीज का आविष्कार वह करते हैं तो उससे जो मुनाफा होता है उसका भी परसेंटेज दिया जाय और उसके लिए कानून में प्राविजन की जरूरत है ।

Dr. H. C. Cooper: In actual practice, they get it. In a large number of cases they get a percentage.

Shri P. A. Narielwala: For the last one or two years, Indian manufacturers are now going abroad with their technical know-how. You may have heard recently of the case of Hard Board Factory which has put up a factory in Canada. Indian know-how, Indian technology is now being exported to Canada where it has been given special patent protection. This is merely a single instance. As we develop, we shall do so.

श्री राम सेवक यादव : मेरा सवाल तो यह था कि जब इंडियन साइंटिस्ट किसी नयी चीज का आविष्कार करते हैं और उससे कोई कारखानेदार मुनाफा कमाता है तो उस मुनाफे से उसको एक हिस्सा मिले ताकि वैज्ञानिकों को प्रोत्साहन मिले इस तरह की कोई व्यवस्था कानून में होना जरूरी है ।

Dr. H. C. Cooper: We are not in favour of any statutory regulation for this purpose but the matter must be entirely left to be negotiated between the scientists and the industrialists concerned.

श्री राम सेवक यादव : इसकी आवश्यकता समझते हैं आप कानून में न सही वैसे जरूरी है ।

Mr. Chairman: He says, by agreement of parties.

Official from Ministry: Apart from the expenditure by Government on research, can you give us any information of the amount of money spent by private industry on research?

Dr. H. C. Cooper: We do not have the data except the broad general fact

that many of the research institutions, for instance, the sponsors of the art silk and other associations, the textile industry etc. have been spending very considerable amount.

Official: Can you give us some information.

Dr. H. C. Cooper: We will try to collect more precise information and give you.

Shri P. A. Narielwala: There is the Tea Research Association. The cotton textiles have 3 laboratories—one in Bombay, one in Ahmedabad and another in South India. We will try to get the information.

Shri R. Ramanathan Chettiar: Only one question. We are providing in this Bill process-cum-product patent. Do you agree with this?

Shri P. A. Narielwala: Normally, it is the process which is patented, but, particularly in the pharmaceutical industry or some other chemical industry sometimes a product patent may become necessary and desirable. Therefore, provision for a product patent should also be there.

Shri R. Ramanathan Chettiar: You agree with this?

Shri P. A. Narielwala: Yes, Sir.

Mr. Chairman: Thank you very much.

Dr. H. C. Cooper: We are most grateful to you Sir, and to the Committee for a very patient hearing.

(Witnesses then withdrew).

The Committee then adjourned to meet again at 15.00 hours).

(The Committee reassembled at 15.00 hours).

II. Trade Marks Owners Association of India, Bombay—1.

Spokesmen:

1. Shri S. H. Gursahani, Chairman
2. Shri R. A. Shah
3. Shri C. K. R. Rao, Secy.

(The witnesses were called in and they took their seats)

Mr. Chairman: Any evidence that you give is public. It is published and distributed to our Members, and also laid on the Table of the House. Even if you want any portion to be confidential, it has to be published and circulated to the Members. We have received your Memorandum and it has been circulated to all the Members. If you want to add anything, you may do so. After that our Members will put questions. Please begin.

Shri S. H. Gursahani: Mr. Chairman, with your permission, may I have a minute or two to say something about the Association which I represent. I will also introduce very briefly the colleagues accompanying me here to assist the Committee. The Trade Marks Owners Association of India, of which I am the honorary Chairman (my other occupation is that I am an officer of Hindustan Levers) was formed in 1953 at the suggestion of the then Minister for Commerce Shri John Mathai in order to encourage the study of problems relating to all forms of intellectual properties including patents, trade marks, designs, etc. which have importance in national or international trade and commerce. The Association has since then been doing its best to assist the Government and represents in its membership a cross-section of Indian industry ranging from light and heavy engineering to cigarettes and matches, soaps and toiletries food products, pharmaceutical and chemical industry and various other consumer and non-consumer industries. The purpose of the Association is to study objectively and from the industrial point of view the implications of Industrial Property Law. Mr. Rao, on my right,

is the permanent Secretary of the Association and before he joined the Association he was a prominent lawyer in Bangalore. Mr. Shah, on my left, is a practising solicitor and a senior partner of a well-known firm of solicitors in Bombay and he has been closely associated with the professional activities of the Association.

Sir, we have submitted our memorandum and we are fully alive to the fact that the time of the Committee is extremely valuable and we should not use this opportunity merely to reiterate what we have said before but only to supplement and elaborate.

Shri R. Ramanathan Chettiar: To which firm do you belong?

Shri S. H. Gursahani: I belong to Hindustan Levers in my day-to-day life and am the Honorary Chairman of this Association as one of my boundary functions.

Sir, the first point on which I would like to supplement our memorandum relates to clause 2(g) of the Bill which defines an article of food. The additional point which I would like to urge before the Committee is the power sought to be given to Government to extend the scope of this definition by notifying certain articles to be regarded as articles of food for purposes of this Bill. This may have the effect of introducing a degree of uncertainty in the minds of patentees as regards the scope of their rights and the duration of the protection. An article which may not have been capable of being an article of food when the patent was granted could by Government notification be converted into an article of food with the result that any patent granted, for the product itself as might have been permissible at the time of the grant of the patent, may then get in danger of being revoked on the ground that it is now to be regarded as an article of food. The other effect is the duration of the patent which initially may have been granted for the full period of 14 years, under the general clause of the Bill, may nevertheless be curtailed to

10 years on the ground that it has now become an article of food. These are the problems to which I have not been able to see a satisfactory solution in the Bill. I would like to say that if the definition is capable of being changed by the Government notification it is possible that this may give rise to argument and possibly litigation, to determine whether an *ipso facto* curtailment of the rights of patentee has taken place as a result of such a notification.

The next clause in our representation which I would like to elaborate further is clause 2(1) which defines a drug. I would specially direct my comments to the aspect of the definition which includes within its ambit intermediates used in the manufacture of drugs. I feel, and I am so advised, that a very large number of chemicals which are in one way or another, capable of being used as intermediates in the drugs industry will get involved within the scope of this definition with the result that by and large every known chemical will be subject to the special treatment accorded in the Bill to drugs.

Phenol, salicylic acid and acetic acid are all intermediates in the manufacture of one of the best known drugs namely aspirin. Yet all these three different primary uses, Phenol is an important intermediate in the plastics industry and salicylic acid in the dye stuffs industry. Acetic acid is table vinegar in certain dilutions.

The next point which we have not taken up in our memorandum, I hope you will forgive me because as one studies the Bill even after submission of the memorandum certain points do emerge for consideration which may be worth mentioning to the Committee in the hope that it may be of some assistance to the Committee, is clause 3 (d) which removes from the area of patentability new uses of known substances or new uses of known processes. I submit that in certain contexts and quite frequently, it might be

useful and important that our inventors may be directed towards finding a new use of a known substance and these new uses themselves acquire very great importance in our industry and, therefore, deserve to be treated with the same respect, if I may use that term, as an invention as if the substance is itself discovered for the first time and this is particularly true, if I may say so, in the drug and pharmaceutical industry.

Where substances discovered for the first time to have curative properties as life-saving drugs either by themselves or in combination, by the inventive genius of people engaged in drugs industry, it may be worthwhile to afford to them the same protection as one would afford to the drugs in general. Similarly, processes may be known, but a new application of a process, I submit, is equally an invention and it may be very important, and, therefore, deserves to be protected in the same way as any other invention. In fact, we believe that the legislations of most countries permit inventions of these kinds to be patented.

We have not commented in our Memorandum on Clause 5, which restricts patent protection in the case of drugs, medicines and food to the process of manufacture, and not the substance itself unless it is manufactured by the process which is patented; and we support that this should be so. Protection to the product substance *per se* need not be given. But this is subject to our contention that where a substance has been introduced in the market by an infringer, the burden of proving that the product has been manufactured by a process different from the patented process should be upon the infringer, and not upon the plaintiff who takes him to the court. This will then be in line with the procedure and the law followed by all those countries which do not protect products *per se*. This, we believe, is desirable whether or not that particular product is imported or locally manufactured. It is difficult for a plaintiff to be able to discharge the

onus of proof before the court that the product manufactured by his rival is in fact manufactured by his patented process. It is very difficult when the product is imported. It is, to my mind, not an easy matter for any plaintiff to establish even by appointing referees to find out whether the product has been manufactured by the patented process. So far as the imported products are concerned, I am advised that our Indian law, through court decisions, already recognises the fact that the burden of proof in such cases is upon the infringer. We ask you to consider the extension of this principle to cover cases even when the product is locally manufactured.

In respect of Clause 53, I would only like to add one very minor point. In the various sub-clauses of this clause, the same words are used as in the definition of "food" and "drugs", namely, "intended to be used" and "capable of being used". My suggestion is that there is no need to re-describe these particular products, following the definitions given earlier in the Act. I am suggesting that if for reasons of submissions made, the definitions are changed as a result of further consideration by the Committee there should be no need to make consequential changes in the various clauses of the Bill if the defined terms as such are used in the other sections of the Bill. We may sometimes overlook to make consequential changes.

In clause 53(1)(a) we say: "Where the substance is intended for use or is capable of being used as 'food'". This is, in fact, a mere repetition of the definition of "food" contained in an earlier clause of the Bill.

Mr. Chairman: It is a question of draft.

Shri S. H. Gursahani: I suggest that these words may be deleted. I think the word "food" will convey the same meaning as already given to it in the definition clause.

As regards the other points that we have taken up on clause 53, despite

my promise that I will not elaborate what has already been said, all that we suggest is that while fixing the period of protection at 10 years in the first instance the door should not be entirely shut against instances where genuinely it may be reasonable to consider a request for a short extension on the ground that there has been no fault on the part of the patentee. I would request the Committee to give a sympathetic consideration to this suggestion. It has been said that ten years is not a short period and that the industry has been known to reimburse itself with research expenditure in a lesser period. That is a question of fact. But in the case of certain patents, it is likely that a lot of preparatory work has to be done before full production on a commercial scale can be resorted to and adequate return can be taken by a person responsible for the invention and research. We have suggested that there should be two extensions permissible under the Act, in stringent conditions if you like, where the Controller should be able to decide on the merits of each case to give two extensions of two years each. It will in exceptional cases bring the patent back to the 14 years period. Clause 88 puts a ceiling on the royalty payable on patents of a certain nature. On this we have three comments.

Firstly, our quarrel is not that it is not 8 per cent or 10 per cent. There is no magic in fixing any ceiling because as human experience shows, anything which is prescribed as maximum quickly degenerates into the normal. Surely there will be patents which deserve far less, and others which deserve much more, but the result may well be that this 4 per cent may tend to be accepted without a careful investigation.

Secondly, the exploitation of a patent or invention carries with it two other aspects which are equally important and which are usually delivered to the licensee in the form of a package. Apart from the patent specifications, which by themselves are not

of such tremendous value unless they are accompanied by technical know-how, they are also usually accompanied by the right to use a brand name or a trade name. The three together constitute the transfer of the right of manufacture from one person to another. There is no ceiling fixed so far as the transfer of technical know-how is concerned nor the trade mark. They are still in the area of discretion with the appropriate Government machinery. To fix a ceiling with regard to only one aspect will in the first place, according to us, result in difficulties of co-ordination, and where the parties find that as a result of the ceiling inadequate royalty is being sanctioned for the patent attempts will naturally be made to try and make that up to the extent possible by securing a larger amount for the transfer of technical know-how and for the use of trade marks. It is preferable to leave the entire field to the discretion to senior Government officials, because these economic matters are ultimately agreed upon and co-ordinated at very high levels, where Economic Secretaries through various committees consider the full implications of any particular proposal. It would be desirable to do it in that manner than to consider it piecemeal.

Thirdly, fixing the ceiling with reference to the bulk price or ex-factory price of the patented article may have the unfortunate effect of rewarding an inferior invention rather more than a superior one, because, to the extent to which an invention results in a certain ex-factory bulk price and to the extent to which that price is higher, the royalty will be more as long as it is related to a percentage of that particular price, and any process which cuts down the cost of manufacture will suffer by earning for the patentee a lesser amount by way of royalty. Today royalties are fixed with reference to several factors, one important factor being the amount of saving which it means to the licensee, and in such a case the licensee will evaluate the importance of the licence to him not in terms of the price of the

product but the saving that he is able to effect as a result of using an alternative manufacturing process which he is getting from the patentholder. Therefore, the rigidity that it should be 4 per cent on the one hand, and that it should always be related to the price of the product ex-factory shuts out consideration of other factors to which it can be more reasonably related.

The Bill provides for appeal to the Central Government in certain cases and no right of appeal at all in other cases. We find that in many important respects there is no right of appeal. I suggest that in order to cut down delay and expense, you might consider setting up an administrative tribunal on the lines of the Income-tax Appellate Tribunal with jurisdiction over all industrial property laws—not only patents, but also copyrights, designs, trade marks, works of art and literary works etc.—so that in course of time you have a tribunal which is well versed in this rather intricate branch and is able to dispose of disputes between parties and between Government and citizens expeditiously and expertly. To begin with, a centrally located tribunal may fulfil the need, but depending upon the number of matters that come to it, it may probably have Benches in industrial towns like Bombay and Calcutta, consisting of retired or sitting Judges of the High Court or others qualified to be appointed such judges. The number of persons who will constitute it is a matter of detail which can be worked out in the light of experience.

Mr. Chairman: Would you give the right of appeal to the Supreme Court on points of law?

Shri S. H. Gursahani: The writ jurisdiction of the Supreme Court cannot in any case be ousted. The suggestion I made would only replace going to the High Court.

Clause 64(h) which has retrospective effect, we believe, is likely to cause, in actual practice, complications and problems for the patentee, and the Com-

mittee might be good enough to examine whether the hardship of retrospective effect can be mitigated.

Shri M. R. Masani: I was interested in your suggestion that royalty might be linked with something else than the ex-factory price. I thought you made quite a good point when you said that this will act as a disincentive to cutting costs. Can you suggest an alternative formula to which you can hitch the royalty where it would solve itself? It is true that the idea of saving is good, but I am not able to see how you link the royalty to the saving. Would you be good enough to give an alternative formula later on, if you do not have it ready now?

Shri S. H. Gursahani: I have not got any formula at the moment. But I should imagine that when two persons sit down and negotiate how much royalty is to be given, the buyer must be fully aware what this means to him in terms of saving. He would not try to buy it otherwise. It is a question of reaching a reasonable formula between themselves, which would give one a reasonable return and the other a reasonable value for it. I am sorry I have not got any particular formula as such.

Shri M. R. Masani: So, the amendment you suggest would be one to remove the four per cent ceiling altogether and in any event to remove the ex-factory price as a way of computing the four per cent.

Shri S. H. Gursahani: That question might be re-examined along the lines of our suggestion.

Mr. Chairman: Will you be satisfied with an agreed royalty, subject to the approval of the Controller-General?

Shri S. H. Gursahani: This would be certainly an improvement in the sense that no rigid ceiling is enforced. But there is the other point which I made a little while ago, namely, that it is in fact a three pronged consideration, so that it might be the Controller if

you like, or anyone who is competent to look into all the three aspects.

Shri Kashi Ram Gupta: Please refer to page 2 of the memorandum regarding clause 8. You have mentioned at the end that "it is therefore submitted that sub-clause (2) of this clause should be amended to read as 'If the Controller entertains a reasonable doubt as to the novelty or the patentability of the invention, he may, for reasons to be recorded in writing, require the applicant to furnish details relating to the objections'". How can you distinguish this point, "reasonable doubt as to the novelty"? What is meant by reasonable doubt? How can one interpret in law whether a doubt is reasonable or not?

Shri S. H. Gursahani: We do deal with points of reasonableness throughout our commercial and ordinary life, and I respectfully submit that it should not be difficult for an experienced controller to say that in a particular instance, he is not quite certain whether an invention for which protection is being sought is novel or not. In such a case he may wish to be assisted by people outside the country who may have greater knowledge and greater experience in dealing with these matters, and therefore ask the applicant to assist him in respect of any objections that might have been raised elsewhere and what has been the outcome of the application.

Mr. Chairman: Normally he is guided by the opinion of experts here.

Shri S. H. Gursahani: If he is advised by his advisers that this is a matter which is not free from doubt, he may then be assisted by the experience of people outside.

Mr. Chairman: Why go outside? We have our own experts and assessors here.

Shri S. H. Gursahani: I was meeting this point half-way, in the sense that one cannot say that we are self-sufficient in technical knowledge and ability to assess claims. Much has been

said about a large number of patents on the register today which need not have been on the register had we had more experience in evaluating those claims.

Mr. Chairman: I can understand a situation where there is no expert, but when we have our own assessors and advisers, you should be guided by their opinion. Don't you agree?

Shri S. H. Gursahani: Primarily yes.

Shri Kashi Ram Gupta: Why do you want the law to include these wordings? These wordings need not be included in a legal way. "For reasons to be recorded in writing"—that is the process they have got.

Shri S. H. Gursahani: As the Bill stands at the moment, it is an automatic requirement if an application has been made elsewhere; the applicant is obliged to keep the controller fully informed of the progress of the application elsewhere, the objections raised and the answers given and the outcome of the application. All that we are suggesting is that this should not be automatic. This should be necessary only when the controller considers it necessary and calls upon the applicant to furnish information, and as a further safeguard, we suggest that this should be done by the controller after recording his reasons in writing. This goes to the fundamental issue that when an order is passed, the applicant should be given full opportunity to know the basis on which a particular order is being passed because a certain obligation is being imposed on him. I would take the point of the hon. Member that as long as it is not automatic, most of our point is met. This requirement should not be automatic.

Shri Kashi Ram Gupta: At page 3, clause 15(2) (a), you say that the controller may refuse an application if it has made any contravention of the chapter on conventions has been made and if the contravention is wilful or inadvertent. You say that when it is

an inadvertent contravention of the provisions of this section, the controller should have the power to treat the application as a non-convention application. Again, the distinction between wilful and inadvertent contravention in a legal way does not seem to be a practical proposition.

Shri S. H. Gursahani: My humble submission is that this is a legal enactment to be enforced by the authorities, who will apply it according to law and will have to interpret the various provisions of the law, and, we trust, competently, and therefore, I see no particular difficulty in deciding whether a thing is wilful or otherwise. This particular issue is decided by quasi-judicial officers, judging people's conduct and seeing whether it is wilful or inadvertent. All that we are saying is that not in every case should an applicant be deprived of the right altogether of getting his patent protected, merely because he has erroneously claimed a priority to which he is not entitled. The worst that should happen is that the priority could be taken away if criminality or culpability can be attributed to him.

Shri Kashi Ram Gupta: Was there not a similar case covered by a clause in the previous Act?

Shri S. H. Gursahani: No. Even the BIRPI model law to which India's representative was a party has suggested that the only consequence of such a contravention should be that the priority should be taken away.

Shri Kashi Ram Gupta: In clause 53, you say that in no country is the protection as little as 10 years. In Italy it is 10 years.

Shri M. R. Masani: In Italy it is still at the stage of a Bill so Mr. Gursahani is right that there is no law.

Shri Kashi Ram Gupta: I am only giving him this information.

Now, take page 9, clause 56. You have put in a clause which I do not

find in the model law. You have said:

"(2) For the purpose of sub-section (1) above the Controller shall not grant a licence unless he is satisfied that such other patented invention serves industrial purpose different from those of the invention forming the subject of the earlier patent, or constitutes noteworthy technical progress in relation to it."

Before this, you say that "In this connection, we would recommend to the consideration of the Committee the model clause prepared by BIRPI". The BIRPI model law does not contain this clause. Will you please clarify it?

Shri S. H. Gursahani: A similar provision does exist in the model law, although naturally it does not refer to sub-section (1) because that has been worded to suit the drafting requirements of this particular Bill. If you turn to page 62, section 36(1) of the model law, it says:

"If an invention protected by a patent within the country cannot be worked without infringing rights deriving from a patent granted on a prior application or benefiting from an earlier priority, a compulsory licence may, upon application, be granted under the conditions specified in section 44 to the registered owner of the later patent, to the extent necessary for the working of his invention, in so far as such an invention serves industrial purposes different from those of the invention forming the subject of the earlier patent or constitutes noteworthy technical progress in relation to it."

Shri Kashi Ram Gupta: The wordings given here do not have the same context. So, if these wordings are adopted, will it not defeat the very purpose of compulsory licence?

Shri S. H. Gursahani: We respectfully believe it will not.

Dr. C. B. Singh: In page 1 clause 2(1) you say, "this definition of drug will have the effect of covering almost every known chemical". If you go a little further, you agree you begin from carbon, hydrogen, oxygen, calcium, sodium, etc. and the whole thing is covered like that. In that manner, you say chlorine forms a part, benzene forms a part, sodium forms a part and so on. The whole thing is covered like that. When we say 'drug' we are quite clear in our mind about it. Why should there be any doubt in your mind?

Shri S. H. Gursahani: There is no doubt in our mind. We only submit that the definition as it stands is so wide that it probably goes a little beyond the original intention of giving special treatment to a particular kind of patent.

Dr. C. B. Singh: You gave the example of benzene. With that, you can have so many things. Chlorine, benzene and everything comes in. That does not fit in with our definition.

Shri S. H. Gursahani: With due respect, I gave the example of benzene because I thought I might begin with benzene and go to two intermediates which are formed in the course of manufacture of a drug-phenol and salicylic acid. It is reasonable that the manufacture of aspirin or any patents connected with that should be properly regarded as a drug subject to any special treatment. But there is no justification for including phenol which has got other primary uses and salicylic acid or acetic acid which is vinegar.

Dr. C. B. Singh: Benzene alone forms so many things like chloroquine, etc.

Mr. Chairman: If we say, any chemical which is used as an intermediate product, will that satisfy you?

Shri R. A. Shah: The real intention is to confine the definition to primary drugs, but as it stands, it covers not only drugs but also chemicals. Phenol is used in various other industries, but

unwittingly it becomes a drug for the purposes of this Act and suffers the same limitations applicable to drugs.

Dr. C. B. Singh: Phenol is used as a drug in itself for certain purposes. Benzene also is used as a drug.

Shri R. A. Shah: We are talking about the basic raw benzene, not tincture benzene; raw benzene is a petrochemical product.

Dr. C. B. Singh: About the period, are you quite clear in your mind that you do not want 14 years but 10 years with two extensions of 2 years each?

Shri S. H. Gursahani: If it is considered vital to make a distinction between drugs and other products, we would hold on to 10 years with two extensions of two years each.

Dr. C. B. Singh: About appeal, you have said that the appeal should be to a tribunal and highest appeal will be to the Supreme Court. Is that correct?

Shri S. H. Gursahani: We have suggested, rather than providing for appeals from Caesar to Caesar, it might instil more confidence in industrial property owners if there is a provision for appeal from the decisions of the Central Government or the Controller to a tribunal which might be independent of the department and which will look at the problem objectively and judiciously and not be hidebound by considerations of policy or executive action.

Mr. Chairman: You want that instead of appeals to the Central Government all appeals against the decisions of the Controller should go only to the tribunal and in the final stage to the Supreme Court?

Shri S. H. Gursahani: That is correct. We agree to that.

Dr. C. B. Singh: Evidence has come before us to show that the distinction between process and product is arti-

ficial, that a process can produce many products and so many processes can produce so many products. Do you subscribe to this view? Do you want that there should be product patent or process patent?

Shri R. A. Shah: I think there is a lot of rationality and justification in not granting or not protecting products by themselves, and in the circumstances in which we operate in this country I think it would be adequate and reasonable if products which are made by particular processes are protected.

Dr. C. B. Singh: You are in favour of patent for product by a certain process and not in favour of process alone nor products alone.

Shri R. A. Shah: Yes.

Dr. C. B. Singh: What are your reasons for that?

Shri R. A. Shah: Otherwise there may be a tendency to import from abroad articles which are manufactured about and such imported articles would not constitute a breach of the patent law here. That would be an incentive to imports and a disincentive to import substitution.

श्री चौरडिया : आपने देखा होगा कि कई लोग पेटेंट लेने के लिए जितने भी सम्भावित प्रोसेस होते हैं उनको पेटेंट करवा लेते हैं। क्या कुछ प्रोसेस पेटेंट करवाने की व्यवस्था ठीक रहेगी या सभी सम्भावित प्रोसेस पेटेंट वे करवा सकते हैं, यह व्यवस्था ठीक रहेगी ?

Shri S. H. Gursahani: If the protection is afforded to a product manufactured by the patented process, then I appreciate the hon. Member's question, that this can probably be got over to some extent by the patent holders trying to patent as many processes as they can think of and in this way not only achieve the limited protection of product by a particular process, but products by themselves. But, at the

same time, it is cumbersome. It would involve expense on research which will be unjustifiable, and we believe that the protection of product manufactured by a particular patented process is adequate.

Mr. Chairman: Supposing the protection is provided only for the process by which a product is manufactured, what is your reaction?

Shri S. H. Gursahani: The processes may be of a kind which may give rise to an end product.

Mr. Chairman: There may be half-a-dozen processes. He may use only one and not use the other five. We can give protection to that process by which he manufactures the product.

Shri S. H. Gursahani: I think he can, if he chooses, obtain protection for all the processes which may lead to a particular product. If, in addition to that, a further process, at any future time, be developed by somebody else, it will not preclude him from getting that process patented merely on the ground that it leads to the same product.

Shri R. A. Shah: If the other processes are not utilised he faces the consequences of compulsory licensing, revocation etc.

श्री चौरङ्गिया : आप चाहते हैं कि पेटेंट की जो अवधि है वह ज्यादा होनी चाहिये। आपको पता होगा कि हमारे यहां पर जब तक प्रोडक्ट्स पेटेंटिड नहीं रही हैं उनकी कीमतें बहुत अधिक रही हैं और उपभोक्ता को बहुत नुकसान उठाना पड़ा है। मैं उदाहरण आपको बताता हूँ। विटामिन बी 12 की इन्डियन मार्केट प्राइस 2000 रुपये पर ग्राम थी और इसकी सब्सिक्वेंट मार्केट प्राइस 40 रुपये पर ग्राम हुई। इसी तरह से स्टेन्डोमाइसीन की 19 रुपये ग्राम और अब 1 रुपये ग्राम है। प्रेडनीसोलोन

की 15000 रु० एक किलोग्राम की प्राइस थी और अब चार हजार रुपये है। इसी तरह से टेट्रासिलीन की एक हजार रुपये और अब 240 रुपये है। क्लोरामैफिनीकाल की 1600 रुपये थी और अब 240 रुपये फी किलोग्राम है। इससे साफ जाहिर होता है कि इन्वेंशन वगैरह के पैसे निकालने के बाद भी उपभोक्ता को बहुत ज्यादा दाम देने पड़ते हैं। दस वर्ष के बजाय अगर चौदह या सोलह वर्ष की अवधि रख दी जाए तो उपभोक्ता को बहुत ज्यादा दाम देने पड़ेंगे। उसकी इस तकलीफ को दूर करने के लिये आप क्या सुझाव देते हैं?

Shri S. H. Gursahani: Actually, this is a question of finding a balance between an adequate return as a reward for invention and thereby encouraging inventions or inventiveness in the country and the national interest of the people here. Ultimately, ten years, I believe, will afford in normal circumstances, a reasonable length of protection. But all that we pleaded for was that in proper cases the door should still be left open. One reason why we are not advocating an initial period of 14 or 16 years is that a shorter period of ten years will, to our mind, activate the manufacturers to try and intensify production and try to recover the research expenditure or preliminary expenditure that they might have incurred during that period by higher production. This will be an incentive to speedy translation of the invention into commercial exploitation.

श्री चौरङ्गिया : इसके लिये अगर कोई सीमा निर्धारित कर दी जाए कि इतने वर्ष की अवधि में इतने प्रतिशत से अधिक मुनाफा उनको नहीं दिया जाना चाहिये जिस में उनकी खर्च का खर्च भी बसूल हो सके तो उसके बारे में आप का क्या सुझाव है ?

Shri S. H. Gursahani: I am afraid, I did not understand the importance of this question.

Shri V. M. Chordia: If the prices are fixed in such a way that a margin is kept so that they may recover the cost of research and invention, at the same time ensuring that they may not charge an excess price, as was done in one case where they charged Rs. 2,000 per gram previously and Rs. 40 now, will you agree to that?

Shri S. H. Gursahani: I think the Government have adequate powers under the Industries (Development and Regulation) Act and the Essential Commodities Act to fix the prices of essential commodities. I have never been averse to judicious use of governmental power to fix prices at reasonable levels. But price fixation is not all that easy, in the sense that it must be preceded by a fairly complicated inquiry into the cost structure, into various other factors which go into the composition of the cost of manufacture of a particular product.

श्री चोरड़िया : ज्यूडिशल ट्रिब्यूनल के आप पक्ष में हैं। जब इसकी कास्टीट्यूशन वगैरह के बारे में पूछा गया तो आप कोई स्पेसिफिक सुझाव नहीं दे सके हैं। क्या आप लिख कर भेज सकेंगे कि इसमें कितने सदस्य हों और इसका हेड कौन हो ?

Shri S. H. Gursahani: I assure that the hon. Member is referring to the judicial tribunal which I have suggested. It is difficult to foresee at the present time how many matters of industrial property law will result in appeals and what will be the speed with which they will be disposed of.

Mr. Chairman: We will consider that point.

Shri R. Ramanathan Chettiar: In the course of your observation earlier you referred to an apprehension about this Bill not protecting the industrial property.

Shri S. H. Gursahani: I do not recollect having made any such drastic observation about the Bill.

Shri R. Ramanathan Chettiar: You referred to adequate protection not being given to industrial properties.

Mr. Chairman: He did not say that.

Shri S. H. Gursahani: All that I said was that in a Bill of this kind you must necessarily try to find a balance between adequate protection on the one hand to those who spend time and money in inventions and national interest on the other. So, proper balance has to be reached. Then I went on to make a few general observations on the memorandum we had already submitted and I drew attention to certain points in the Bill which might perhaps be re-examined in the light of those observations and emphasized and supplemented some other observations.

Shri B. K. Das: Referring to page 4 of your memorandum, do I understand that you want a definite clause to be put down in the Bill that the onus of proof that a new process has been applied should lie on the defendant and not on the plaintiff, that is, the patentee?

Shri S. H. Gursahani: That is my suggestion. It should be clarified by means of an appropriate provision in the Bill that in cases of this kind where protection is only given to a product manufactured by a particular process the defendant should have the burden of proof that the product put by him in the market is the outcome of a different process.

Shri B. K. Das: Under the existing law it is otherwise. But have you come across any case where the patentee has found it difficult to prove his own case?

Shri S. H. Gursahani: I have come across a number of cases in which imported articles are involved in in-

fringement. The manufacture takes place, let us say, in Europe. The local importer is charged with infringement. He is unaware of the process by which the manufacturer in Europe has manufactured the product. It is very difficult for the court here to judge whether the product imported is covered by the patent granted here especially when the manufacturer is not amenable to the jurisdiction of the Indian court.

Mr. Chairman: On page 8 of your memorandum you say:

"The Government has powers under clause 48 to import for its own use or for the use of dispensaries and hospitals. This being so, it is only fair that any import on broader considerations of public interest (such as shortage of a particular article) should be undertaken only against payment of suitable compensation to the patentee."

If it is in the public interest, why should the Government pay compensation? Suppose there is an epidemic, should they not do that?

Shri S. H. Gursahani: We have suggested that the power should be exercised only in such grave circumstanc-

es; not otherwise. Public interest is a term which is so wide that it may *prima facie* refer to any governmental action. All that we are saying is, rather than throwing the door open for the Government to take action in any circumstances, let it be circumscribed in areas where it is really and vitally necessary like an emergency, epidemics or things of that kind.

Mr. Chairman: If it is done in a national emergency, or for defence purposes or when there is an epidemic, you have no objection?

Shri S. H. Gursahani: I have no objection. But still I do not see why even then compensation should not be paid. It is not only a question of quantum of money. The objection is to the principal infringing somebody else's rights.

Shri R. Ramanathan Chettiar: Article 31 of the Constitution says that no compensation is payable when public interest is involved.

Shri S. H. Gursahani: I think Article 31 does not provide for compensation.

(The witnesses then withdrew)

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965

Thursday, the 7th July, 1966 at 09.50 hours

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Panna Lal Barupal.
5. Sardar Daljit Singh.
6. Shri Basanta Kumar Das.
7. Shri V. B. Gandhi.
8. Shri H. K. V. Gowdh.
9. Shri Kashi Ram Gupta.
10. Shri Madhavrao Laxmanrao Jadhav.
11. Shri Braj Behari Mehrotra.
12. Shri Naval Prabhakar.
13. Shri A. T. Sarma.
14. Dr. C. B. Singh.
15. Dr. L. M. Singhvi.
16. Shri Ram Sewak Yadav.

Rajya Sabha

17. Shri Babubhai M. Chinai.
18. Shri Vimalkumar M. Chordia.
19. Shri P. K. Kumaran.
20. Shri Shyamnandan Mishra.
21. Shri Dalpat Singh.
22. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India*.

DRAFTSMAN

Shri R. V. S. Perisastri, Deputy Draftsman,, Legislative Department,
Ministry of Law.

SECRETARIAT

Shri M. C. Chawla—Deputy Secretary.

WITNESSES EXAMINED

I. Indian Pharmaceutical Association, Bombay.

Spokesmen:

1. Mr. K. C. Chatterjee, Vice-President.
2. Dr. J. N. Banerjee, General Secretary.

II. Bundesverband Der Pharmazeutischen & Industrie E. V., Frankfurt Am Main, West Germany. (Association of the German Pharmaceutical Industry, Frankfurt AM MAIN).

Spokesmen:

1. Mr. Curt Engelhorn, President.
2. Dr. Scholl, Adviser.

I. Indian Pharmaceutical Association,
Bombay.*Spokesmen:*

1. Shri K. C. Chatterjee.
2. Dr. J. N. Banerjee.

(The witnesses were called in and they took their seats).

Mr. Chairman: The evidence that you give is public; it will be printed and published; it will be circulated to all the members and will also be laid on the Table of the House. Even if you want any portion to be treated as confidential, it will be printed and published; it will be distributed to our members and will also be laid on the Table of the House.

You have given your Memorandum; it has been circulated to all the members. If you want to add anything or stress any point, you may do so. Thereafter members will ask questions.

Shri K. C. Chatterjee: First of all, I would like to thank you, Mr. Chairman, and the Select Committee for giving us this opportunity to be here today. As we have mentioned in our letter, Dr. U. P. Basu, who is the President of the Association, was taken

ill suddenly and has, therefore, not been able to come. I, as the past President and the present *ex-officio* Vice-President, am, therefore, leading this team today and I would do my best to put some of the matters forward to you.

The Indian Pharmaceutical Association, which we represent, was started in 1941. We have branches everywhere—in all the States. There are 22 branches altogether. There are about 4,000 members. We publish a journal. The Association holds annual conferences where the various sections of pharmaceutical interests assemble and discuss their mutual problems. We do not have any trade union activities. Our headquarters are in our own premises in Bombay where we also run a college of pharmacy. Our interest is mainly academic, although we do help our members in professional

matters as well. But, as I have said before, our Association has no trade union activities.

I would like to introduce my colleague, Dr. J. N. Banerjee, who is the Secretary of the Association. He did his Bachelor of Pharmacy course in India and went to the University of Nottingham where he did his Ph.D. in pharmacology. He was a lecturer in the Glasco University for some time. He is also the President of the Maharashtra State Branch of the Indian Pharmaceutical Association. He was a member of the delegation in 1963 which went to U.S.A., U.K. Germany, Switzerland and Japan. He is an examiner in pharmacology for various universities, including Bombay, Rajasthan and Saurashtra. He is also a Joint Managing Director of Sandoz.

About myself, I am K. C. Chatterjee. My basic pharmaceutical training has been in the U.K. I returned during 1938-44 War; I returned in 1942 and joined the Government as an Industrial Planning officer in drugs and medicines. I then joined M's. Boots Pure Drugs Co., in India where I was the works Manager as well as a Director. I have left this company some time ago to take up independent pharmaceutical consultant business. I am now consultant to a number of pharmaceutical factories, but I am not in anybody's pay roll. I was the President of the Association. I was also the President of the Indian Pharmaceutical Congress. I am a member of the Pharmacy Council of India, a member of its Executive Committee and also the Chairman of the Education section. I am also a member and the Vice-President of the Maharashtra State Pharmacy Council. I am also a member of the Development Council in pharmaceuticals. I am also an examiner in various pharmaceutical subjects. I am a Fellow of the Pharmaceutical Society of Great Britain. I am also the hony. Principal of the Bombay College of Pharmacy. In fact the main reason why I have given up a fixed job is to be able to serve the

Association in the capacity of hony. Principalship.

Shri R. P. Sinha: Is it not an Industries' Association?

Shri K. C. Chatterjee: It is mainly an academic body. We have some industrial problems pertaining to some of our members but we are not interested all that in the financial side. What we have is: a large number of our members are pharmaceutically trained and qualified. They are working in the industry and research and in manufacture and it is their problems, the technical side of their problem, the association deals with.

Shri R. P. Sinha: Only individuals can become members of the Association. Am I correct?

Shri K. C. Chatterjee: Yes. They need to have a certain amount of pharmaceutical background, pharmaceutical academic training.

The interest that our Association members have in this Patent Bill is that a fair number of our members have gone abroad; they have come back and in addition a large number are trained now in the Indian Universities and at least half of our members are capable of pharmaceutical research and contribute in some way to the advancement in the industry. It is our object to see that the facilities that our members now seek both in the Institutes and in the industry receive some impetus. It is also in the interest of our Association members to emphasize that we would like to see that the country reaches a high level of technical know-how if possible by our own efforts, if not by any other method that our country can get. Our members would also like to see that actual manufacture in India is done of synthetic chemicals, not merely of pharmaceutical formulations. In that way also we like to feel that our members would be greatly benefited and will also be able to help by bringing about advancement of the industry.

So our interest is not as much in the financial part of the industry as we would like to see that pharmaceutically qualified personnel have scope either in the Universities or in the industry to develop the research and other technical expertise. From this point of view our Association has looked at the Patent Bill and we have felt that although there has been at one time some talk of abrogation of patents altogether, the Government has instead decided at the moment to amend it which we think will be conducive to the objects that we have in mind.

The Association agrees with a very large number of provisions in the Bill and I would not waste the time of the Committee by saying which way we agree. But there are just a few points where we feel that certain amendments will be liked by our Association members. We have chosen in our memorandum only a few points where we have complete unanimity amongst our members. In fact these were submitted in the form of memorandum. It is probably unnecessary for me to go pointwise at this stage. But there is one point that I would like to mention about clause 53 regarding term of patent.

In our memorandum you would notice from paragraph 8, that our Association has recommended that the period should be 16 years. We had further discussions on the subject and we do not feel that 16 years should be all that necessary. We would like to say that 10 years would be adequate provided that in some cases where perhaps a lot of time is wasted in launching a product, there be some facility of extension of time. If after the chemical research in the laboratory and registration of the patent, some 8 years were spent until it was possible to put this product in the market, in such special cases some consideration should be given for extension of the period.

Shri R. P. Sinha: I would like you to give us some examples. What do you mean by 'special cases'?

Shri K. C. Chatterjee: Take the case of thalidomide when sometime after the product was introduced, it was found to be toxic. The net result of that is that the pharmaceutical industry is now a little too fearful; it may now conduct clinical trials to make quite certain that there is no toxic effect on the present or even the next generation. It might take in certain specific cases much more time to assess its potentialities not only potentialities but toxicity and it may not be possible to introduce a product for 5 or 6 or 7 years after registration. In a case like this special consideration should be given. Otherwise, 10 years is adequate.

Shri V. B. Gandhi: Would you specify what you mean by special consideration? Do you mean extension of period by 2 years?

Shri K. C. Chatterjee: Extension of not more than 4 years. The only difficulty that comes to our mind is a legal matter and here we are not really competent to say very much. It may be picked up by persons who are legally more qualified than we are. If the same substance is used both pharmaceutically and chemically and if one has 14 year life and the other 10 year life, there may be some legal complications. But as far as our association is concerned, we shall be quite happy to see a 10-year period with provision for extension in very special cases. The rest of the matter we have already mentioned in our memorandum and I don't see much point in my going through it point by point, except that we would like to say that our association feels that Justice Iyengar's Report was a very comprehensive one and no doubt the Committee will take full note of this. That is all that I have to say at the moment unless there are questions from Hon'ble Members.

Shri R. P. Sinha: I would like to seek one or two clarifications from

the witnesses. I understand that the pharmacists who are members of this association are actually carrying on research in the pharmaceutical field.

Shri K. C. Chatterjee: Yes, Sir.

Shri R. P. Sinha: So you are the real people who make the real inventions. Am I correct?

Shri K. C. Chatterjee: There are two main types of pharmaceutical research that are going on in India just now. One is known as 'fundamental research' where attempts to discover completely new drugs are made. In this particular field, we have made very little progress, although some of our boys having worked under expert guidance particularly abroad have made a name. The other type of research is known as the 'product development research' which is going on in our country in various factories and I am an adviser to this particular side of research. And I would say that we have made a good deal of progress in this particular field. May I just clarify what I mean by 'product development'? It is the conversion of a chemical into a product suitable for human consumption. Let me give you an example. There is an antibiotic called "Griseofulvin". This is useful in fungus infection. When the first ointment was made, it was found to be comparatively useless because it was not properly absorbed. Then the formulation had to be changed and now "Griseofulvin" is used with very good results. So it is the conversion of the basic substance into a pharmaceutical product suitable for various types of use that we have in mind. This is called "product development research" and this has advanced extremely well in India. Regarding "fundamental research"—trying to discover completely new substances—we have a large number of people who with proper training or with proper guidance will be excellent scientists, but at the moment,

we do not have very many on this side.

There is another kind of research which is known as "molecular rearrangement"; that is, if somebody has discovered already an organic chemical which is useful in medicine, then it is possible to alter this particular molecule to some extent and either to increase the activity or decrease the toxicity. Some advance has been made by our members in this field also. But I don't think we have made much progress in the field of original research which leads to discovery of completely new chemotherapeutic substances.

Shri R. P. Sinha: I would like to know how a patent law helps the pharmacists. What I mean is this, that we provide the patent so that the actual research worker should draw benefit from that. We understand that research workers are engaged by organisations, by companies and industries but the patent is not given to the man who actually does research and invents but is given to the company where he is employed. Now I would like to know how it benefits people like you who actually make the inventions. I understand that West Germany is the only country where the royalty is shared, that is a certain portion of the royalty is given by the employer to the research worker. How do you benefit in India? How are you paid? Unless a remuneration or reward or compensation is given to you, how will it work as an incentive to you to do more and more research?

Shri K. C. Chatterjee: Well, it was our hope that perhaps the Select Committee could help us in this. This has been a grouse of some of the workers in this industry....

Shri R. P. Sinha: You have not said anything about that to us. Will you explain as to how the Select Committee can help you in this matter? Will you explain as to how we can help so that more and more

of Banerjees could come out in this country?

Dr. J. N. Banerjee: Sir, incentives are given in various ways. There are companies where there are provisions that if a patent is brought out by an individual, the benefit should be shared between the company and the individual concerned. There are other companies where the incentive is shown in other ways. If there is a scientist who is able to develop a number of products and has got a number of patents to his credit, he comes up more and more in the company in various positions. So it varies from company to company. But perhaps what you would like to know is how the patent law directly helps the pharmacist or the research worker. Indirectly he is benefited for the patent that he invents directly depending upon the nature of the commitments he has got to the industry for which he works. The company also derives benefit from his invention. After all the company pays money for the research. He is not the only man working there. He is only one of the many people engaged in research in the company and his work may become successful. The company is paying a lot of money for the research. The company can encourage research by saying that their inventions or the inventions made by the company are protected and the successful worker will be rewarded.

Shri R. P. Sinha: Now, for example, take the Copyright Act. The author gets benefit under the copyright law for 50 years. If he dies, then his children will get the benefit. Now suppose a brilliant scientist as a direct result of this research gets in Germany, I am told they share the patent. I would like to know what you have in your mind when you say that the Joint Committee should help you. What do you mean by saying that the Joint Committee can help. Can you give us any proposals?

Shri K. C. Chatterjee: One proposal that could be made is that the patent could be taken jointly by the research worker and the company. That would be of help. There is that system in some places—I think in the U.K.—where although the person has been working in the research laboratory of a company, it is in his name as well as the company's name that the patent is taken.

Dr. J. N. Banerjee: I think, Mr. Chatterjee tried to make this point clear in the beginning that our interest in the Patent Bill is that we have a number of workers—our members—who are in the pharmaceutical companies, and it is in our own interest to see that the atmosphere is conducive to further research in various fields. This is possible by having, as you are doing here, Sir,—a Patent Bill which will produce more research work and the companies will be prepared to invest in research. Also technology today is more international. There should be give and take. There should be flow of technology from country to country, so that we too develop ourselves. We should buy wherever we want to. In order to do so, the atmosphere should be conducive. That is where the Patent Law could give security to the people who are going to invest money in research, and indirectly, the profession is benefited.

Shri R. P. Sinha: What amount of money is being spent on research work on this basic, or product, or the three types of research works you have said, in this country? We have been told that the research expenditure is so heavy that unless we provide adequate patent protection, the people who spend the money on research work cannot get compensation. Could you please tell us what should be the relationship that should exist between the research investment and the patent protection?

Mr. Chairman: We have got the answer yesterday. Yesterday people were here who gave that answer.

Shri R. P. Sinha: I would like to know from them.

Mr. Chairman: Have you got the figures as to what amount is being spent on research?

Shri K. C. Chatterjee: We cannot give the figures.

श्री चौरड़िया : आप ने अपने मेमोरेण्डम के पेज 2 पर कहा है कि जब गवर्नमेंट किसीका पेटेंट राइट ले ले तो उस को कम्पेन्सेशन देना चाहिए। क्या आप इसमें वे परिस्थितियाँ भी शामिल करते हैं, जब डिफेंस का मामला हो या राष्ट्र के हित का प्रश्न हो, आदि? क्या आप चाहते हैं कि जब गवर्नमेंट जनता के हित में पेटेंट राइट ले ले, तब भी उसको कम्पेन्सेशन देना चाहिए?

Shri K. C. Chatterjee: What we had in mind was that when there is an emergency, the question of compensation does not really come in, but under normal circumstances, we feel that for the development of the research and industry in the country, since there is already a provision of compulsory licensing, it does not seem necessary that this particular clause need be there.

श्री चौरड़िया : किसी को पेटेंट राइट दिये जाने पर शुरू शुरू में वह बहुत अधिक कीमत लेते हैं। उदाहरण के लिए विटामिन बी-12 की कीमत शुरू शुरू में दो हजार रुपये प्रति ग्राम रही, जबकि बाद में वह मार्केट में 40 रुपये प्रति ग्राम के हिसाब से मिला। इसी प्रकार और भी कई आइटम्स हैं। मैं उनका जिक्र नहीं करना चाहता हूँ, क्योंकि आप उनको जानते हैं। क्या आप कोई सुझाव देंगे, जिससे कन्ज्यूमर को भी राहत मिले और इन्वेन्शन करने वाला भी नुकसान न हो? क्या आप कोई उचित प्राइस निर्धारित करने के सम्बन्ध में कोई सुझाव देना चाहेंगे?

Shri K. C. Chatterjee: Actually you notice that in our Memorandum we

had selected only a few points where we have a complete agreement amongst our members. On matters touching the price and trade, if we do express any opinion here that will have to be regarded completely as our personal opinion because we have not got any brief from the Association on the points other than those that have been agreed upon. We have discussed this for many days and this is the greatest agreement that we have got amongst our members and our members felt it should be only these few points on which we should give any evidence. I am just wondering whether we could be excused in not answering many points.

श्री चौरड़िया : आप ने अपने मेमोरेण्डम के पेज 3 पर अपील के बारे में कहा है :
“... वाई फ्रिक्सिंग टाइम लिमिटेड्स फ़ार इट्स डिस्क्रिब्ड ग्रान स्पैसिफ़िक मेटर्स”। जब अलग अलग प्रकार के कैमिज़ रहते हैं—किसी में टाइम ज्यादा लगता है और किसी में कम—, तो इस अवस्था में टाइम लिमिटेड फ्रिक्स करना कैसे सम्भव है?

Shri K. C. Chatterjee: Here we can only hope that it would be done expeditiously.

Mr. Chairman: You can give your personal views. Your Association may not have authorised you to give opinion on this. You are an expert.

Shri K. C. Chatterjee: On what point?

Mr. Chairman: On the previous point raised i.e. on the price question.

Shri K. C. Chatterjee: Will you repeat the question please?

श्री चौरड़िया : किसी को पेटेंट राइट दिये जाने पर शुरू शुरू में वह बहुत अधिक कीमत लेते हैं। उदाहरण के लिए विटामिन बी-12 की कीमत शुरू शुरू में दो हजार रुपये प्रति ग्राम रही, जबकि बाद में वह

मार्केट में 40 रुपये प्रति ग्राम के हिसाब से बिका। इसी प्रकार और भी कई आइटम्स हैं। मैं उनका बिक्री नहीं करना चाहता हूँ, क्योंकि आप उनको जानते हैं। क्या आप कोई सुझाव देंगे, जिससे कन्ज्यूमर को भी राहत मिले और इन्वेन्शन करने वाले का भी नुकसान न हो? क्या आप कोई उचित कीमत निर्धारित करने के सम्बन्ध में कोई सुझाव देना चाहेंगे?

Shri K. C. Chatterjee: As I have said, this will be my personal view. I do not think that there need be very great difficulty in Government taking some sort of power to look into the cost and production problems.

Shri Peter Alvares: My suggestion is personal view may not be insisted upon. After all he is a representative of the Association.

Mr. Chairman: Why not? He is an expert.

Shri R. P. Sinha: I would like to make a statement. These two witnesses represent certain Association but they are, in their own right, great experts in this field. Sir, Mr. Banerjee represents one of the biggest foreign concerns where (we are told he is working in the capacity of probably Joint Managing Director) no patent products are manufactured. This is what he told us when we visited the factory. My knowledge is this, he is one of the most respected men in the profession. I would request you after everybody has put questions to give me one more opportunity to put questions, and I would request Mr. Banerjee to answer my questions to enable us to find solutions of the various problems that we are facing in this committee. He can do so in his personal capacity.

Shri V. M. Chordia: You have mentioned in your Memorandum that some clauses should be amended in accordance with the recommendations made by Justice Ayyangar. Do you have some differences with that report also?

Shri K. C. Chatterjee: This is again a personal question.

Shri V. M. Chordia: You have come here as a witness.

Mr. Chairman: You may say it is my personal opinion.

Shri K. C. Chatterjee: Well, we do not agree with everything that has been said in the report. But, on the other hand, if you ask me about the points on which we do not agree, I am afraid I personally am not prepared. I must excuse myself by saying that I was not supposed to be leading this deputation.

Shri V. M. Chordia: You must have seen the Indian Pharmaceutical Association's report, addressed by Shri Rohit. You have given there a schedule, Annexure V, in which you have given gross profit and other figures also. Can you give us some figures as to what percentage is spent on advertisement and what percentage is spent on research?

Shri K. C. Chatterjee: I personally cannot. I will request Mr. Banerjee to answer that question.

Dr. J. N. Banerjee: I am afraid the industrial point of view, as Mr. Chatterjee has said is not represented by the Association, and I am unable to answer this question.

Shri B. K. Das: I find from your Memorandum that in some cases you want that there should be a provision for compensation. I want to know what should be the basis of that compensation, if it is at all conceived.

Shri K. C. Chatterjee: Our idea was that normally when there is compulsory licence there should be no distinction made between the Government and the rest of the community.

Shri B. K. Das: There should be a provision of compensation and there

should be some basis. That was my point.

Shri K. C. Chatterjee: The basis should be exactly the same as compulsory licensing to any other party outside.

Shri B. K. Das: But here there is a provision for royalty of 4 per cent. Do you agree to that amount? That is the ceiling we have put there.

Shri K. C. Chatterjee: Well, this was a matter which was discussed by our Association and we felt that as scientists are wanting to fall in line with the Government it should be our endeavour to agree to this. We had a number of our members who pointed out that it may not always be possible to get a patent at this particular price. This, I am afraid, is one of the most debatable points and we had amongst ourselves difference of opinion on this. In general, we felt that if a businessman really wanted a good patent and if he had to pay to be able to procure this, as is done in Japan, I am told, he will only pay a higher amount if it is worthwhile for him. Perhaps this particular ceiling may act against the country. But, then, again the opinion in our Association is divided on this. That was the reason why we have not put it forefully in our memorandum.

Shri Shyamnandan Mishra: There is no need to embarrass them any further.

Sardar Daljit Singh: I want to know whether you agree with the opinion given by Justice Ayyangar.

Mr. Chairman: He said so. They agree with the recommendations of the Ayyangar Report.

Sardar Daljit Singh: One thing more. The Development Council, after taking into consideration all the facts affecting Indian production suggested that the local manufacturers should not pay more than 60 per cent above

the c.i.f. price. I want to know your opinion. Do you agree to this suggestion?

Shri K. C. Chatterjee: This is again a matter of personal opinion, because we have not discussed this issue in our Association. At the moment, whenever a manufacturer starts making any basic manufacture, he has been procuring the raw-materials, as far as possible, from the country, and in most cases he has been paying very much more than 60 per cent for his raw-materials. Quite often, it becomes almost impossible to meet this particular ceiling the Development Council thought of at one time. This is my personal experience with some of the companies I am associated with as adviser.

श्री ब्रज बिहारी मेहरोत्रा : नये नये आविष्कार होते रहते हैं । मैं यह जानना चाहता हूँ कि आविष्कारक को उचित लाभ भी प्राप्त होता रहे और साथ ही जन-साधारण को लाइफ-सेविंग उस और दूसरी मेडिसिज माडरेट प्राइस पर मिलती रहे, इन दोनों उद्देश्यों की पूर्ति के लिए आप पेटेंट की क्या अवधि रखना चाहते हैं ।

Shri K. C. Chatterjee: I think, in a way, we have answered this question. Again, that is my personal opinion. The Association will be quite happy to accept ten years unless there are legal difficulties, in which case we would like no distinction made between a pure chemical and a pharmaceutical, because a pure chemical is quite often a pharmaceutical also.

श्री ब्रज बिहारी मेहरोत्रा : क्या ऐसा प्रतिबन्ध लगा देने से विदेशों में होने वाले आविष्कारों से हमारे देश को लाभ पहुंचाने में अड़चन नहीं आयेगी ? क्या आप कोई ऐसा सुझाव देंगे, जिस से हम दूसरे देशों में होने वाले आविष्कारों से लाभ उठा सकें और साथ ही आविष्कार करने वालों को भी इन्सेन्टिव मिले ?

Dr. J. N. Banerjee: We have said this in a very general manner in our memorandum that this is affected by a number of clauses in the Patents Bill proposed—period of patent, question of royalty etc. In general, what we said is that the atmosphere should be conducive so that the Indian entrepreneur should be in a position to buy the know-how or the patent for exploitation in the country. He should be in a position to pay whatever royalty he has to. There are a number of things which really affect this.

श्री ब्रज बिहारी मेहरोत्रा : अब तक जितने भी पेटेन्ट्स हुए हैं उनमें नब्बे परसेंट विदेशियों द्वारा लिये गये हैं और उनमें अधिकतर ऐसे हैं, जिन का प्राडक्शन यहाँ नहीं होता है और जो बाहर से इम्पोर्ट किये जाते हैं। क्या आप इस स्थिति में सुधार लाने के लिए कोई सुझाव देना चाहेंगे ?

Dr. J. N. Banerjee: This is a question of general development of the pharmaceutical industry in the country. There are not only patents which are not exploited in the country. There are a large number of drugs on which there are no patents, which are not manufactured in the country. That is more because of lack of technical know-how? It is really the industrial base of the country which has to be improved.

श्री ब्रज बिहारी मेहरोत्रा : जिन चीजों का पेटेन्ट लिया जाता है, उनकी तरफ लोगों का आकर्षण एक दम से बढ़ जाता है, जब कि जिन चीजों का पेटेन्ट नहीं लिया जाता है, उनको लोग इग्नोर करते हैं। क्या यह बात सही है ?

Dr. J. N. Banerjee: I could not answer the question.

Shri Kashi Ram Gupta: Are inventions these days the result of individual scientist's effort or collective effort of more than one scientist?

Shri K. C. Chatterjee: I shall have to go back to some of the points that I have touched before.

If you are talking about fundamental research leading to the development of a chemotherapeutic drug, then it is a complete team work, and this teamwork so far has been tried in Government institutions in various countries without conspicuous success. So far, it is the development of industrial research which has produced anything in the way of fundamental chemotherapy which is worthwhile. This organisation is normally a very huge one, so much so it may have to produce something like seven to eight thousand drugs of which one may be of some use. Then there is the other part, where the basis substance which somebody has discovered is altered slightly to make a different drug which gives some benefit perhaps in activity or lessening of toxicity. This work can be done by individual chemists. The third type, product development, can be done by a very small team. It does need a team, but a small team.

Shri Kashi Ram Gupta: May I conclude then that so far as fundamental research is concerned, as the expenses are heavy, the individual scientist is not in a position to do much there?

Shri K. C. Chatterjee: You are correct.

Shri Kashi Ram Gupta: Since basic research has to be done in an organised way either by Government or big industries, and applied research can be done on a smaller scale, may I conclude that when somebody applies for a patent it is for product research and that basic research has been done somewhere else?

Shri K. C. Chatterjee: That will depend on how the patent has been covered. Some patents are covered by the basic substance as well as all products thereof. There are some where patent is taken merely on the fundamental chemicals.

Shri Kashi Ram Gupta: In this Bill, the process leading to a product is to be patented, not the product itself.

Shri K. C. Chatterjee: I think we are slightly confusing the matter. Let us take the concrete case of sulphathiazol. If I am taking a product patent, whichever way you make it, it is covered by the patent, so that, starting from sulphathiazol, other researches that come up would not be covered by this patent at all. Our scientists would be free to take sulphathiazol and convert it into other products, and those will not be covered.

Shri Kashi Ram Gupta: Is it a fact that most of our scientists employed by organised industries are remunerated in bulk and not on a percentage basis, in addition to their pay, for their inventions?

Dr. J. N. Banerjee: It differs from company to company. I have no experience of this.

Shri Kashi Ram Gupta: You have said that a ten year period will be generally sufficient. May I know whether it is from the date of completion of the specification as provided in the Bill or from the date of the grant of the patent? I want to know whether you have considered it.

Shri K. C. Chatterjee: It is from the date of completion of the specification.

Shri Kashi Ram Gupta: My last question is this. Has your Association been able to consider the clause on revocation or was there any difference of opinion on it?

Shri K. C. Chatterjee: Anything that we have not mentioned here are such controversial matters that we would rather not refer to them.

Dr. C. B. Singh: I suppose Mr. Banerjee is a scientist.

Dr. J. N. Banerjee: I started my life as a scientist and I am now in

the capacity of a Joint Managing Director. The research department is under me. But I cannot say that I am purely a scientist now.

Dr. C. B. Singh: All right. Now, during the last 15 years, when we see the list of new single chemical entities discovered during the last 15 years in various countries, we find that the number is 355 in USA, 36 in Switzerland, 28 in UK, one in Italy and one in India. Now, could you please tell us why, in spite of such a large number of talents in India—you have mentioned that there are 4000 pharmacists in India who are doing good work—the number of single product patented or discovered is only one, as compared to round about 356 in the USA?

Shri K. C. Chatterjee: India has come out with one drug that has come out from Hindustan Antibiotics, where we have a sizeable research department. That department does compare reasonably favourably with the research departments I have seen elsewhere in the world.

Dr. C. B. Singh: You are more or less at the top of this firm as well. So, may I know from you what is the amount of money that you are spending on research at the moment, taking your turnover into account?

Shri K. C. Chatterjee: I personally can only hazard a guess. In the research laboratories that I am associated with as adviser to various companies, I would say that in the middle-sized companies where I am adviser, it is no more than about one and a half per cent. I am only expressing my personal opinion.

Dr. C. B. Singh: Yesterday we were told by a very eminent gentleman that it is almost a drop: not even 0.1 per cent.

Shri K. C. Chatterjee: My own experience has been with the companies that were in difficulties.

Dr. C. B. Singh: A very important question today is this: out of a large number of products which are being processed by the pharmaceutical firms, what is the proportion of patented drugs to unpatented drugs, and what is the percentage?

Shri K. C. Chatterjee: If you are talking about the number, then, I think it is not very significant, but if it comes to the amount involved.

Dr. C. B. Singh: I am talking about the number of patented drugs being sold out and the number of unpatented drugs. I want you to tell us, as a pharmacist, what is the proportion of the patented drugs that you are selling in the market as compared to the unpatented drugs.

Shri K. C. Chatterjee: About 80 per cent will be unpatented.

Dr. C. B. Singh: I am talking about the number, not the money. Is it not greater in number?

Shri K. C. Chatterjee: It may be more.

Dr. C. B. Singh: The greater part of the processes that you are putting in the market is unpatented. Is that correct?

Shri K. C. Chatterjee: Yes.

Dr. C. B. Singh: You have said that the pharmacists wanted help. What will you suggest? Will you suggest that we could put down a compulsory expenditure on research on the sale outturn of the company so that they will be bound down by a schedule that they will spend so much money on research?

Dr. J. N. Banerjee: The companies have to exist more or less upon the product of their original research, and so, the companies must bring out more and more new drugs and they would have to spend a large amount of money on research. But by compulsion, I do not know how far we

will be able to force the pharmaceutical industry to spend. It depends upon various companies.

Dr. C. B. Singh: You know that they are not doing it and you are aware of it. I am asking the question whether something can be done so that they will be compulsorily bound down to spend money on research. I know it depends upon the directors of the firm.

Shri K. C. Chatterjee: Here again, the Association would like to see it done, but I do not think we can suggest how it can be done or what should be the specific method.

Dr. C. B. Singh: In some countries they are spending about 5 to 10 per cent of their outturn on research, and some countries are spending more than that. Would you like to suggest something?

Dr. J. N. Banerjee: The first thing today in India to do is to establish a pharmaceutical industry where our needs are met. We may not be able to start running them just now. We might be able to accept things which have been discovered in other parts of the country. We are miles and miles and years and years behind other countries. Let us buy those which are already available and then start making our own research.

Dr. C. B. Singh: You have been doing nothing but copying others all these years. You still want to perpetuate that copying?

Dr. J. N. Banerjee: Only a few years ago our pharmaceutical industry started. Let us make those drugs which our country needs today and then from that basis let us proceed, because the industry can spend on research only when they have sufficient profit which they can plough back into their research organisation. Unless the outturn is high, you cannot force anyone to do research by compulsion.

Dr. C. B. Singh: You are speaking as Director of the company; not as a scientist. Thank you.

Shri Babubhai M. Chinai: The witness has said that they would be satisfied with a period of 10 years for a patent. They have themselves said that they represent only the research employers in their individual capacity on this association. May I know whether their view as individuals is shared by the pharmaceutical industries as such? Even 16 years, according to some of them is not sufficient, because the initial 6 or 7 years are taken away in primary research and by the time they come with a definite proposal, the period left is very short. So, is your view shared by the industry as such.

Shri K. C. Chatterjee: No, industry would like a longer period.

Shri Babubhai M. Chinai: If that is so and if it is the industry which will be paying the research scholars, how is it that you express a view which is contrary to theirs?

Shri K. C. Chatterjee: A large number among us are holding high positions in various industries and we hope to persuade them.

Shri Babubhai M. Chinai: Persuasion comes afterwards. The question is whether it is really practicable.

Shri K. C. Chatterjee: The industry says in certain cases it takes a very long time before a patent can be exploited. If the Government agrees to that proviso, then we have no objection.

Shri Babubhai M. Chinai: Regarding clauses 99, 100 and 102, you say it is unfair that the public sector companies or Government departments should have the patent free. Is this observation of yours based on the Constitution of India which says that Government has no right to take away anybody's property free and compensation should be paid?

Shri K. C. Chatterjee: We were not thinking about the Constitution. We were thinking that if you are going to have a patent system, the protection should be there.

Shri Babubhai M. Chinai: You have said that only 1 per cent of the turnover will be spent on research. We are very badly in need of research to bring down the cost of production so that apart from local consumption, we can export our products. So, don't you think there should be more spending on research and if necessary Government should give some incentive for more research so that ultimately the Government and the people will be benefited?

Shri K. C. Chatterjee: There is no doubt about the need for more money and efforts going into research. How to ensure it, I am afraid we have not been able to come to any decision about that.

Shri P. K. Kumaran: In your memorandum you say that in developing countries, a judicious compromise should be made between effective patent protection and measures to safeguard against possible abuse of such protection, etc. Will you elaborate what you mean by judicious compromise?

Shri K. C. Chatterjee: I mean the sort of thing the Bill wants to do. Compulsory licensing is one such compromise. The provision regarding royalties is another.

Shri P. K. Kumaran: So, on the important points, you consider the Bill is a judicious compromise?

Mr. Chairman: They agree that it is so.

Shri P. K. Kumaran: They object to clause 95(3).

Mr. Chairman: They say when there is an emergency they agree to it.

Shri P. K. Kumaran: If the drugs which we require are available in the

country only at a very high cost and if Government decides to import it, will they object?

Shri K. C. Chatterjee: If there is no emergency and merely because a product is available outside at a cheaper price than in the country the Government wants to import it, our association would object to it. We would rather wish that the Government forces the industry to make it in India at a cheaper cost by giving it all incentives and help. Otherwise, the Indian industry will be hampered.

Shri P. K. Kumaran: Then why do you object to clauses 99, 100 and 102 which give the Government undertakings the right to exploit the patent?

Shri K. C. Chatterjee: Compulsory licensing is there and we have no objection to it. We are in favour of manufacturing any product in India.

Shri P. K. Kumaran: You are in favour of Government being vested with extra powers to force the industry to manufacture it here?

Shri K. C. Chatterjee: Yes.

Shri Dalpat Singh: In your view, should the time for a patent be the same or different in the developing countries and in the developed countries? What are your reasons?

Shri K. C. Chatterjee: I think one of the problems of all developing countries is that technologically it takes them considerably more time to put a product in the market. After the chemist has finished his job, the clinical assessment has to be made. Simultaneously with it, the technological aspect of large-scale manufacture will have to be considered. In both these two fields, at the moment, our country has not made very great advance. Comprehensive clinical trials, in a sense, that is necessary for drug research is not there in our country. It does take at least three years before we can make any assessment. Similarly, it is not enough to

design a plant. We need first to develop not only the laboratory method but a method for manufacture. Having done that we need chemical engineers to design the equipment. When they have designed that, it takes a very long time to get delivery of the plant. To give you an example, for reaction tanks, orders placed on even very well equipped firms will not take anything less than two years. Therefore, in a developing country it is not easy to exploit a patent quickly. In the United Kingdom, about which I have some experience, there are certain plants which are called multi-purpose plants. Drugs are coming in one by one and becoming obsolete. Therefore, it is necessary that the research work done, is exploited very quickly. They have certain plants which with certain adjustments can within a period of a month take up an entirely new chemical substance. On that basis, it will be my submission that a developed country need not have a very large number of years. Supposing we want to say that it is reasonable to expect a research to be exploited in a period of 7 to 8 years, by giving just a year or two extra perhaps a developed country may be able to do that, but our country will take an additional three or four years in the beginning to be able to put anything in the market.

Shri A. T. Sarma: You have stated in the concluding paragraph of your memorandum that certain clauses are to be amended according to the recommendations of Justice Ayyangar. Will you enlighten us by giving three or four concrete instances?

Dr. J. N. Banerjee: We do see that there are a number of things in the present Bill which are contrary to the recommendations of Justice Ayyangar. The general feeling in our Council was that Justice Ayyangar's report was based on a very thorough study of the subject and therefore it should receive full consideration of the Committee. There is, for example, clause 2(h) about the definition of "public undertaking". Jus-

Justice Ayyangar has said that the definition should be restricted and it should not include organisations like the CSIR. We see that the definition as given in the present Bill is rather wide and is contrary to what Justice Ayyangar has said in his report. There is also the clause relating to royalty. Although the considered view of a majority of members of the Council was that 4 per cent is all right, there is another view that if you place a ceiling on royalty it might hit the interests of a genuine Indian entrepreneur. Supposing there is a certain process which a certain foreign company has, a truly Indian company in order to make this process more economic would not be able to have it because, after all, you cannot force anybody to part with his property unless he is given the price he wants for it. The amount of royalty compared to the total cost of production is not much and, therefore, my feeling is that we should not put a ceiling which will truly put an Indian entrepreneur at a disadvantage. There are other means by which the Government can put a ceiling. There are other clauses like appeals etc., where we have said that it should be judicial appeal. We have also said that there should be screening of pharmaceutical manufactures in a more vigorous way to see that a man is really competent to do the job and make standard drugs etc.

Shri K. V. Venkatachalam: Is your organisation the only organisation representing pharmaceutical dealers in India or is there any other organisation?

Shri K. C. Chatterjee: There are chemists and druggists associations, there are hospital associations, pharmacists association etc. But the slant in almost every case is towards trade union activities. A large number of these associations are members of our organisation as well. So we have tried to keep the trade union activities as far out as possible. We cannot claim that we are the only organisation, but I think we can claim

that we are the only academic sort of organisation.

Shri K. V. Venkatachalam: Could you say that your membership includes quite the large majority of the people who are in this field?

Shri K. C. Chatterjee: I think we can say so.

Shri K. V. Venkatachalam: From that point of view, I think the Joint Committee will attach the greatest importance to any evidence that you might give to the Committee. I would like to ask one or two general questions. Even if you are not able to answer them from the point of view of the Association as such, if you could answer them in your personal capacity, it would be valuable to the Committee. First, what is your own impression about the amount of money spent on research? You were saying that it is not adequate. But is any money spent on research at all now?

Shri K. C. Chatterjee: CIBA Research Centre is the only one which has done something in an organised way. Bengal Immunity Research Centre is also reasonably well organised. Apart from them, I personally think that we do not have any research organisation of the type we require.

Shri K. V. Venkatachalam: You were mentioning three types of research—basic fundamental research, molecular changes and product development.

Shri K. C. Chatterjee: Product development is done in all medium-sized factories. I am not suggesting that is not important, but that part of the research which is money-consuming is done, as far as I know—I may be wrong—only in two centres, namely, CIBA and Bengal Immunity.

Shri K. V. Venkatachalam: What about public sector factories?

Shri K. C. Chatterjee: I am very much impressed with the research that is being carried out at Pimpri. I

think they have got a very good research centre. That is the type of research that should be done. So far as the national laboratories are concerned, if we compare them with what is being done outside India, they are not doing anything at all.

Shri K. V. Venkatachalam: What is your own impression about the development of pharmaceutical industry in India during the last ten years? Are they making merely formulations or does it go down to more basic levels?

Shri K. C. Chatterjee: We have made tremendous strides; there is no doubt about that. My own impression is that we are doing extremely well. I would like to see the production costs going down. But when I raise this point I am told that the prices of raw materials have gone up.

Shri K. V. Venkatachalam: Quite an amount of evidence has been given before the Joint Committee that the total effect of this Bill, when it becomes law, would be to retard the development of pharmaceutical industry. The intention of patents in the final reckoning is to produce more good quality products. So, what is your own view about the effect of this Bill?

Shri K. C. Chatterjee: Except for the ceiling on royalty that you have put down, which might cause some difficulties. I personally do not think that it will retard progress.

Shri R. P. Sinha: The prices charged by the industry for patent drugs are very high and the reason given is that they have got to meet the cost of research. It is true that the community has got to meet the cost of research. At the same time, the prices of life-saving or health-giving drugs should not be unreasonably high. Since Sandoz would be making a reasonable profit on their investments, I would like to know from Dr. Banerjee as he is running a model laboratory whether the pro-

fitability in patent drugs today is unreasonably high and, if so, whether some steps should be taken through the medium of the Patent Bill to bring down the profitability without affecting the research on drugs.

Dr. J. N. Banerjee: We are now discussing the Patent Bill and I think cost does not come within the purview of the Patent Bill which you are considering. You would agree that research costs a lot of money in the laboratories and that the few products which come out of the laboratories should bear the cost of research. I could not say what is reasonable profit. I am sure the Government have got adequate powers already to control the prices, outside the purview of the Patent Bill. Above all, there is competition. So, the best way to control the price is to have free trade. Let a number of companies make the same drug. I am sure competition will ensure that prices of drugs come down. Even today in the pharmaceutical industry there is a lot of competition. If some company comes out with a new drug, it does not mean that it has a monopoly. Another company could make a drug of that class. Then, the cost of the drug has something to do with the cost of raw materials, cost of energy etc. Because of these, the cost of even unpatented drugs is higher in India.

Dr. C. B. Singh: The Government of India is spending Rs. 30 lakhs to Rs. 35 lakhs on the Central Drug Research Institute, Lucknow, which has a good laboratory and other facilities. Has CDRI been able to make any new drugs?

Shri K. C. Chatterjee: As far as I am aware, no original drug has come out of CDRI.

Dr. C. B. Singh: You are representing a very important organisation and probably you are keeping in touch with what the CDRI is doing. Have you any idea of the problems on which they are working in the CDRI?

Shri K. C. Chatterjee: Not recently.

Mr. Chairman: We will try to visit that.

Shri Borkar: As you have represented, drug inventions have got a special significance to us. Unlike other inventions, where the invention is the property of an individual and the experiments are confined to the precincts of a room, in the case of drug research you have to go out into the field to the hospitals, and carry out clinical trials, maybe, on thousands of patients, before you market a drug. In that sense a large number of patients on which the drug is tried out participate in your research. Unless you give something back to these people, you will not have done your duty by those people. In this context do you not think that the patents of drugs should be a special consideration on the part of researchers and firms who do research? Although you say that the question of prices is separate but it does have a bearing on prices, to the extent that medical people and patients participate in research. So, should you not give anything back to them in the shape of reduced cost of drugs?

Shri K. C. Chaterjee: I must say that this is a new angle that has not occurred to me before. I have a feeling that Dr. Banerjee has answered your question by saying that at the moment we are concerned with how to make things in India and how best we can make them. As regards price fixation, really, the Government has the power to guide the industry and to force us also. There should not be any reason why this costing should not be available to Government for inspection for fixing a reasonable margin of profit to the people who are manufacturing them. But I cannot see how people who have been unknowingly co-operating with us in the clinical trials could get a fairly direct benefit—in a general way, yes; but, there

again, I think, the best possible remedy would be for the Government not to let the industry make too much profits.

Mr. Chairman: Thank you very much, gentlemen.

The witnesses then withdrew.

II. Bundesverband Der Pharmazeutischen & Industry E.V., Frankfurt Am Main, West Germany.

Spokesmen:

(1) Mr. Curt Engelhorn, President.

(2) Dr. Scholl, Adviser.

(The witnesses were called in and they took their seats)

Mr. Chairman: Gentlemen, the evidence that you give is public. It will be printed and distributed to all our Members and will also be laid on the Table of Parliament. Even if you want anything to be treated as confidential, it will be printed and distributed to our Members.

We have received your memorandum and it has been circulated to all the Members. If you want to stress any particular point or wish to make any new point, you may kindly do so. After that our Members will ask you some questions.

Mr. Curt Engelhorn: Mr. Chairman and hon. Members, it is a privilege for us to be able to present our views to this Committee. We have come all the way from Germany since we consider your task a very important one. Please accept our observations as sign of co-operation and interest in the welfare and development of your nation.

I would first like to introduce myself. My name is Curt Engelhorn. I am President of the German Pharmaceutical Manufacturers' Association. I am also President of the C. F. Boehringer & Sons, Mannheim, Germany. I have brought with me Dr. Scholl,

who is Secretary of the Association and a specialist in German patent law. He will be able to answer or help me answer detailed questions in regard to the German patent law.

As far as our Association is concerned, it has 657 member-companies. These 657 companies account for 95 per cent of the production of pharmaceuticals in Germany. I can say that our Association is highly respected and that it is heard by our Government as well as the governments of the Common Market countries for the preparation of important legislation.

Next I would like to point out that we are very much impressed by the parliamentary procedure that is followed in this country. We have the feeling that a fair hearing is given to many different parties and we have the feeling that this does justice to the complications and the complicated side of this subject you have under consideration. Knowledge, of course, of all these many sides leads to responsibility and we admire that this responsibility is not being evaded. We consider this type of hearing an important and possibly unique precedent.

Now, I would like to point out to the hon. Committee the three Roots from which my interest, in this case, stems. The first is an interest in your country which goes back to a very close friendship which I formed with one of your countrymen when we went to the University together. The second is a joint venture which my company formed with Indian partners in Bombay. In this joint venture, we are producing drugs and we are producing one very important drug chlorophenicol, Prospectrus Anti-Biotics, a broad spectrum Anti-Biotics in considerable volume. The third root is an old interest and friendship that exists between Germany and India. I do not have to go into details. I believe, you are aware of some of these aspects that go back many many decades or even centuries.

The steady progress which your country is making is being watched with sympathy and admiration in my country. We realise that the problems you are faced with are mountainous or, to use an Indian express which is even more appropriate, Himalayan. Your determination to solve these problems democratically finds our admiration. The co-operation between India and Germany has grown tremendously over the years and we believe that it should grow further. Gradually, an inter-dependence between our countries in certain aspects is developing and we believe in view of such relations, important policy decisions are observed closely since the effect of such decisions go beyond the material plane. They form the basis of future co-operation and Germany wishes India to progress and prosper.

We feel that in this particular issue of patent legislation there are similarities in the situation we have faced in the past and the situation that you are facing today. A similar or identical approach to the solution of these problems would, of course, help mutual understanding. We also hope that our observations may contribute something in helping you to solve your problems. This, of course, has an influence on the general attitude in regard to the readiness to invest money in a country or to start any sort of enterprise.

The Patents Bill you adopt will have much to do with economic advancement of India. Many studies show that the fundamental approach cannot be different between developed and developing nations. I believe the root for that is that research is international, more so than almost any other human activity. Specially, the research in natural sciences, in engineering and in medicine is of that type. Therefore, the research utilisation and the protection of certain fruits of research is an international problem. This is demonstrated by the fact that the United Nations have given considerable attention to this problem. There is a so-called BIRPI

model law for under-developed nations in order to provide guide-lines for such laws in such countries. The Paris Union exists as a BASIS for countries which have patent laws which differ in details but which all adhere to certain principles. It was interesting for us to see that even countries like Russia joined the Paris Union. Then, there is the draft of the European Patent Convention, an attempt to coordinate European Patent law as closely as possible so as to make the flow of ideas back and forth even more easy.

We would like to report on the German experience. This, after all, is what we know most about. As you well know, the last War was a tremendous stain on Germany's economy. When the War was over, most of our production facilities were destroyed. I remember very distinctly, at the time I was still very young, I could hardly imagine that this could ever be rebuilt. The patents were confiscated by the Allied Nations that had been fighting against Germany and these patents were the German intellectual property. One aspect to that I find quite interesting is that even though the patents became free and anybody could use German patents outside Germany, the Allied Nations did not get much out of that. It so happened that using other people's ideas and other people's inventions without any contact with the original inventor did not seem to turn out to be a good proposition.

Then, we came into the reconstruction phase after we went through the devaluation of our money at 10:1, that is, for 10 Reichs Marks which we had at the time, we got 1 D.M. After this devaluation, the reconstruction we ahead at a much more rapid pace. I would like to give you a few figures here. In 1953, the gross national product was 147 billion D.M. and in 1965 it had grown to 448 billion D.M. But, I think, the figure in regard to exports is even more interesting. In 1950, the exports were to the tune of

8.3 billion D.M. and they grew in 1965 to 71.6 billion D.M., that is, about 9 times as much.

Germany has maintained its patent system in spite of the fact that German patents were not recognised in almost any other country. We see now that this was a wise decision. At the time, it was controversial and the idea of retaliation by not recognising foreign patents in Germany, of course, played an important part. It was realised, however, that, by not recognising foreign patents, we would not get any support, any positive attitude, of foreigners who could help us. Our state was very difficult inasmuch as we had had a very high level of research before the War. But so much went into the Defence effort and so much was completely interrupted by the War that the 10 years between 1939 and 1949 or 1950 threw us back very considerably. We had to find connection again with international research. In order to accomplish that, it was decided to keep the patent law and continue to give full protection to foreigners, and free use of taking of licences was made. The result was a considerable outflow of royalties. I can tell you that we are spending more in royalties than what we are taking in. We have the exact figures with us and we can give them to you.

The German patent law, I would like to highlight quickly, has a number of provisions that, I think, are of interest to you. The protection that we give in the German patent law to the inventor lasts for 18 years.

Mr. Chairman: From which date?

Mr. Curt Engelhorn: From the date of application.

Now the question arose in connection with the Kefauver hearings in the United States whether there should be a change, whether the term of patents pertaining to drugs should be shortened. There were two reasons why no such step was taken seriously. One of them was one of principle. It was felt that one cannot

discriminate between different categories of research or invention. The second was that it was considered of little consequence whether the duration of patent protection was 18 or 20 or 16 or 14 years and in order to really make a difference, one would have to cut down the duration of any particular group of patents very much and this, it was felt, was not warranted. I believe, however, that giving adequate protection to the inventor played a very important part. In Germany we have the institution of product by process protection. This means that, in the case of chemical inventions, the processes are protected by patents and with it also the product produced by such processes. It is important to point out, however, that with this type of protection, it is very difficult for the inventor to prove that anybody else is infringing his patent rights. For this reason, a reversal of burden of proof is provided for in the German patent law. In fact, the protection in Germany is very strong; it can be compared almost to the amount of protection that is given in the United States. Thirdly, as far as importation is concerned, the importation of drugs or products that are patented is considered an infringement of the patent.

An infringement of the patent is not a matter that is taken lightly in Germany. Infringement is a criminal offence.

In regard to compulsory licences, there are provisions in the German patent law. They pertain to public interest. If the Government thinks it necessary in public interest, it can issue a compulsory licence. However, there are two aspects that have to be mentioned. Compulsory licence includes the duty to compensate the inventor and secondly, full recourse is given to courts. An inventor can appeal to courts through all the three stages; he can go upto the Supreme Court. The courts ask "public interest" to be defined very exactly; no loose definition is accepted by courts. In fact, no compulsory licence has

been issued since the War. It is also provided that a compulsory licence can pertain only to the manufacture and not to the importation of any such product.

An institution like "licences of right" does not exist in the German patent law. As I understand it, "licences of right" mean that any one can apply for a licence; that he does not have to prove whether he is able to work it or does not have to stand up to certain other criteria. In Germany this is not so. First of all, the public interest has to be proven and secondly there are also such things as the ability of the applicant to work the patent, the ability of the applicant to pay a commensurate royalty, etc. In the German patent law, no ceiling for royalties is provided for. Royalties are generally agreed upon freely between the parties. In the case of compulsory licences, the court will fix the royalty, but again the patent holder has the opportunity to appeal.

Patents generally, according to German law, cannot be revoked. There is, however, a provision for temporary suspension of the patent in the interest of public welfare. But this clause has never been used. The idea behind it is that, if there should be an epidemic, for instance, and the German drug production would be insufficient to cover the needs, then the Government would suspend the patent temporarily for the period of emergency and be free to import the patented drug by payment of reasonable compensation.

I would now like to come to a close and short summary. It is our feeling that research is international and that protection of intellectual property is, therefore, of great importance for international economic relations. The more we handle such questions internationally, the more there will be the flow of information and co-operation. We also hope, of course, that the continued development of this country will go on. We foresee a time and a day when inventions of importance,

of great importance possibly, will be made in this country and we believe that the inventors of this country will then be grateful for clear and strictly applied patent laws in other countries. Clear laws and regulations do provide a basis of confidence. I think this is important for international relations in general.

Thank you very much Mr. Chairman and hon'ble Members for listening to me. I am now open for questions.

Dr. L. M. Singhvi: In particular I would like to know what provision is there in your country in regard to licensing by right available to the patentee?

Mr. Chairman: It is not there—he said.

Dr. L. M. Singhvi: It is in the statement submitted to us and circulated by the Secretariat that in Germany there is a provision under which a patentee can apply to be marked as a licensee of right. What is this provision?

Mr. Curt Engelhorn: I have a written answer to this. I am not a patent expert. So I have to look it up. So, please excuse me.

I will read out the question:

Can you say that according to German Patent Law any patentee by a declaration to be published and registered may permit another person to use his patented invention subject to adequate compensation?

Now this question is somewhat different from yours. But this is the closest provision there exists akin to something like a licence of right.

The answer to this is Art. 14 of the German Patent Law which refers to the so-called declaration and the willingness of the patentee to grant licence to anybody against adequate compensation. This declaration is published and registered. Afterwards only one-half of the annuities is to be paid

by the patentee. This possibility according to Clause 14 is practically never used by bigger industrial firms, but single inventors and small companies who have no possibility to produce or utilise the invention in any other way and who at the same time want to save money, sometimes make use of this clause. They wish to invite as many licensees as possible. Declarations according to Art. 14 during the period 1950—64 were 10,830 patents and in 1965 there were 8,000 patents. We have no particular experience ourselves as to what the results of these declarations are. It must be kept in mind, however, that such a declaration is completely voluntary. Nobody can force the patentee to make this declaration.

Furthermore, the royalty to be agreed upon is not fixed beforehand but must be negotiated between the parties. In our opinion, Art. 14 of the German Patent Law cannot be compared to anything like a licence of right.

Dr. L. M. Singhvi: In your memorandum you have said that there is only process protection in Germany but that there is a provision under consideration for patent protection of the product also. What is this provision and why is this thing being considered now? At what stage of consideration is this provision of the patent protection of the product?

Mr. Curt Engelhorn: As far as I know—Dr. Scholl has more details about that—the situation is that the process protection presents considerable problems. One of the problems is that in order to get adequate protection the inventor has to study very many different processes. After all in chemistry, once you synthesise a valuable product, it is the value of the product that is of importance. It is particularly so in the pharmaceutical field. Now any educated chemist can devise a process around a single patented one. So all the investigations the inventor has made in the development of this product and

testing it pharmacologically, toxicologically and clinically and so on, would have come to nothing if you were going to patent only one process.

Mr. Chairman: That amendment has not yet been passed?

Mr. Curt Engelhorn: Has not been passed.

Mr. Chairman: The current law is only for process patent?

Mr. Curt Engelhorn: Another difficulty in respect of process patent is its interpretation by the courts. It is very difficult to administer in the court. For that reason it is considered that the product patent should be introduced. But it has to be mentioned here that this draft of the European Patent Convention which has been agreed to by the German Government and it has been also agreed to by many other Governments and has been reviewed also by a number of nations does provide product patents even for chemical and pharmaceutical inventions so that if Germany wants to enter this European Patents Convention, it will have to change its law in that direction.

Dr. L. M. Singhvi: You have mentioned that process protection is without meaning unless there is a shifting of the burden of proof. In that connection you say that in practice, this would mean that it would be impossible to effectively prevent infringements since the infringement cannot be proved. Could you say why it is impossible to prove an infringement? And why the burden of proof should be shifted?

Mr. Curt Engelhorn: You cannot tell from the final product by what process it is made. In rare cases it may be possible if you have an impure substance to analyse it down to a certain point where you can trace more or less what intermediates or solvents have been used. But in a highly purified final product it is practically impossible. Therefore the inventor cannot

not prove that his particular process has been used. Therefore, it is necessary for the man who is charged with infringement to prove that he has not used this process.

Dr. L. M. Singhvi: Under Sec. 66 you have made an observation that it should be modified to limit the generality of these statements and to clearly define the Government's powers to revoke any patent if it considers that it is mischievous or generally prejudicial to the public. Could you indicate in what way it could be made more specific or whether it could not be left to the court or the constituted authorities to determine as to what is mischievous or prejudicial to the public interest?

Mr. Curt Engelhorn: It is one question, I think, on which the observation is very well taken. I think it is a matter of how things are administered in specific countries. As I have pointed out, in the case of public interest, in Germany the public interest has been interpreted by the courts and the courts have very clear definition. Now in this particular case we feel that it would of course increase the security if these terms 'mischievous to be state' or 'prejudicial to the public' were defined a little more closely. We generally know what "mischievous" means; we know what "generally prejudicial" means; but we don't know what the Parliament, which is supposed to pass the law, means specifically when it says that.

Dr. L. M. Singhvi: What was the state of the patent law in Germany before the second world war began as compared to the post-war patent law in Germany, particularly in respect of compulsory licence, licence of right, etc.? Would it be correct to say that the post-war patent law in West Germany seeks to extend a stronger patent protection than that which was available before the war?

Mr. Curt Engelhorn: Dr. Scholl tells me that there is no essential

change in the patent law before and after the war.

Dr. L. M. Singhvi: You have said that a strong patent protection tended to bring in a greater inflow of foreign capital and foreign technical know-how. In what way has it been very beneficial to West Germany as you have sought to make out in your memorandum?

Mr. Curt Engelhorn: I would definitely think that it increased the preparedness of foreigners to put inventions at the disposal of Germany by way of licensing agreements or by exploiting their inventions themselves in Germany. I think there is no question about that.

Dr. C. B. Singh: I will carry forward the process and product part. You said that you were collaborating with a big firm in Bombay in producing chloramphenicol. Is that correct?

Mr. Curt Engelhorn: Yes.

Dr. C. B. Singh: Have you found any trouble regarding the process for production of chloramphenicol and chloromycetin which are produced in the market by Parke Davis also, because chemically, they are both tetracycline with certain changes. So when it comes to process and product, has this process patenting been of some difficulty to you?

Mr. Curt Engelhorn: Well, as a matter of fact, here is a case—one of the rare cases I must underline—where it was possible to develop a completely different method of production of chloramphenicol which varies very much from that of Parke Davis. Since our process was independent of the Parke Davis process, that was taken care of. We also came to an agreement with Parke Davis, because certain aspects of our process were advantageous and were of interest to Parke Davis themselves.

Dr. C. B. Singh: Has there been any difficulty to your firm in Italy because there was no patent law in

Italy? Was it because of the absence of a patent law that you failed in Italy on this product?

Mr. Curt Engelhorn: The situation that developed in Italy was like this. First of all, two or three large Italian companies started the manufacture of chloramphenicol. They soon found out that they could not sell in countries where Parke Davis or ourselves had patent protection. They then came to an agreement with Parke Davis and even through Parke Davis have no patent protection in Italy, these companies were willing to pay royalties to Parke Davis. This was not all of that story, though. Other smaller companies entered the field. After a long period of time, I would say about ten years, production was started. The technology for its production was sufficiently well-known in the United States, Germany and Italy and one could hire a chemist from one of these companies that were producing legally and one could put up manufacture of one's own. The result was that prices dropped because too much chloramphenicol was offered. This resulted in the necessity for many of these small producers to sell at as low prices as possible in the so-called world market, that is, in all those countries where they could sell without infringing any patent. Many of these companies, and I would say almost all of these small companies, have since closed down completely or have closed down chloramphenicol production.

Dr. C. B. Singh: In view of this experience of yours, will you agree to our modification of the patent as process-cum-product patent? Will that solve some of these problems that you face?

Mr. Curt Engelhorn: With a shift of the burden of proof, I think that would be satisfactory, even though I tried to point out that there is a general tendency to use the more simple and clear product protection.

Dr. C. B. Singh: On page 3, para 2 of your memorandum, on Section 48,

you have mentioned "such regulation, which amounts to a nullification of the patent, appears to be in disagreement with the fundamental concept of industrial property and is unknown elsewhere in foreign patent law. The German pharmaceutical industry, therefore, recommends that this section be deleted." The main purpose in having this provision has been public interest and any emergency. Sometimes Government has to face some difficulties about epidemics and other things. Then it becomes incumbent on the Government to do something about it. Now, would you like to stick to your statement that it amounts to a "nullification of the patent" or would you like to qualify this statement, under the circumstances I have mentioned?

Mr. Curt Engelhorn: I would say this: As I have pointed out, in the interest of public welfare, that is for certain well-defined situations even the German Patent Law provides for temporary suspension of the patent. That is Government is free to import such materials in order to cope with an epidemic or a similar emergency. As we understand Section 48, it generally gives the Government the power to import or have other people import on its behalf medicines and drugs. There is no recourse provided to the courts. There is no mention made of compensation. We said that this was not in the best interests of India, because import as we understand it, was not the goal that you were striving for. I understand you are striving for a strong domestic industry and nothing can deal a deadlier blow to your slowly growing and very tender industry than cheap imports.

Dr. C. B. Singh: Will you please qualify this para, so that it may become more acceptable to you?

Mr. Curt Engelhorn: I would recommend that the conditions under which the Government can import be as clearly defined as possible. Secondly, I would provide recourse to some judicial tribunal; and thirdly com-

pensation should not be ruled out in this field.

Dr. C. B. Singh: On page 5, Section 93(3), you have mentioned here that "in our opinion, such regulation goes far beyond any measure reasonably necessary for the safeguard of the public interest".

Mr. Curt Engelhorn: As far as we read this provision and as we interpret it and as we have pointed out in our Memorandum, Section 95(3) enables the Government to direct the Controller to authorise licencees to import the patented article or an article made by the patented process if in its opinion it is necessary to do so in the public interest. Neither the payment of any royalty nor an appeal has been provided for, and that is, as I have already said, what we have in mind. We believe that any such provision should contain the possibility to appeal and also the possibility to be reimbursed by royalty or a similar compensation. In principle, we think, imports are potentially dangerous to your existing industry. When a man has gone through the trouble of building up a manufacturing unit in this country and if the Government has sweeping powers to decree the import of the same material, then you will hurt the manufacturing unit in your country.

Dr. Scholl: In our feeling, there might be cases to give compulsory licencees but even if it is necessary to give licencees, we do not think that it is necessary to deprive the patentee of the right to work his own patent. That is our idea. That is why we say that this Section should be deleted.

Shri M. L. Jadhav: The price of patented products is higher in India as compared to Germany. If so, what is your suggestion to bring it on par?

Mr. Curt Engelhorn: As far as I am informed—we have some statistics on that subject, Dr. Scholl—this is not the case. We can give you some comparable figures in regard to

prices in Germany and prices in India. I believe, however, generally that patent system is only one factor for high prices. This may be due to a large number of different factors. We believe that there should be other methods of tackling the price problem than putting anything in that respect into the Patent Law, or—if I may say so—pattern the Patent Law in such a way that you have prices in mind hoping that you will in this way solve (get away from) that problem. It is our opinion that prices and patents have nothing basically to do with each other

Shri M. L. Jadhav: Your country is holding certain patents in India. Can you tell us out of the patents that are held by your country how many products are manufactured in India? I want the percentage roughly I do not want the exact figures.

Mr. Curt Engelhorn: I am told that of the patent applications in India, about 10 per cent of the patents issued are being actually worked, according to our statistics. It must be added, however, that of all the patent applications in Germany, only 15 per cent of the patents issued are worked. There is only a small difference between the two. The reason being that the patents have to be applied for—considering the nature of the whole patents law—as early as possible and frequently it turns out that the invention for some reason or the other is not sufficiently advanced and does not give sufficient advantages to justify expensive capital investment.

Shri M. L. Jadhav: Can you give us some examples of difference in prices in Germany and India of one or two products?

Mr. Chairman: There is not much difference.

Shri M. L. Jadhav: There is a difference.

Mr. Chairman: You want the whole list.

Shri M. L. Jadhav: Let him give for 2 or 3 products. I am satisfied.

Mr. Chairman: Can you give us the price of Chloromphenical in Germany?

Mr. Curt Engelhorn: Yes, I have this.

Dr. Scholl: We have some figures of Hoechst. The prices of most of the Hoechst products are almost the same. But the prices of Hoechst products in Italy, of the same products which are sold here, are higher than in India. They are higher in the United States. We have made a comparison of prices of products sold in India and in Germany, United States, Italy and France.

Shri R. P. Sinha: Can you give us a copy of that?

Mr. Curt Engelhorn: Yes, we will give you.

Shri R. P. Sinha: Why the prices in India are cheaper?

Shri Yadav: Can you roughly say what is the time from the date of application to the date of sealing?

Mr. Curt Engelhorn: Average 6 years.

Shri Yadav: You mean that 10 to 12 years from the date of sealing is sufficient. The period for patents in Germany, you say, is 18 years. Will you be satisfied?

Mr. Curt Engelhorn: That may be satisfactory particularly when one has to count the time of five years that is used for processing the application. But if it is the goal of Patent Offices to speed up the examination of patents as quickly as possible and when you get for instance the processing period down to two years, the protection of ten to twelve years would, in our opinion, be rather short.

Mr. Chairman: You said that in Germany you have got 18 years from

the date of application and you say that it takes 6 years from the date of sealing. So it is 12 years.

Mr. Curt Engelhorn: No. The invention is protected from the date of application.

Mr. Chairman: In India also the protection goes back to the date of application. What is your objection for 10 years for pharmaceuticals?

Mr. Curt Engelhorn: We consider 10 years too short.

Mr. Chairman: How?

Mr. Curt Engelhorn: Any regulation that gives protection for any period of time between 14 to 20 years from the date of application would be considered satisfactory.

Mr. Chairman: Here also it is from the date of application. It will be the same period. The time of examination does not count in the life of the patent; 10 years are counted from the date of sealing, and an average period of 4 years, 5 years or 6 years has to be counted for the process. Thus a total protection of 14 to 16 years would be provided and this would be satisfactory.

Mr. Curt Engelhorn: That's good.

Mr. Chairman: That is what the law is now. Whatever time is taken in the examination, specification till the date of grant of patent, that is also taken into account. The protection goes back to the date of application.

Mr. Curt Engelhorn: In our understanding, we had interpreted the law differently.

Mr. Chairman: Our present law according to the Bill before us is from the date of specification. So there is not much difference.

Mr. Curt Engelhorn: Quite generally, as far as the term of a patent is

concerned, I think a few things should be said. We mentioned in our memorandum that the absolute minimum of development time for a drug is 3 years from the time when you have information collected for a patent application. But this really is the absolute minimum. It usually takes about 5 years and there are cases on record which took much longer. So, therefore, it can happen very easily that a drug is very often marketed, let us say, 6, 7 or 8 years after filing a patent. This goes for the country where the drug is being developed. Now we have priorities and things like that. The priority period is generally one year. But within this one year a patent in India has to be filed. It may be, however, that introducing the drug or manufacturing the drug in India will take much longer than 1 year after introduction in the home country for various reasons. I am just trying to point out to you that there are very important reasons why the life of patents should not be made too short and we frankly consider 10 years too short. And ultimately, if I may add, we feel that there is a discrimination in these 10 years in the case of drug patents as against 14 years in other cases. This we do not understand.

Mr. Chairman: Do you know that an international Association also recommended that it should be minimum ten years from the date of grant of a licence? Do you agree with that?

Mr. Curt Engelhorn: I think that is something we could agree to from the date of sealing.

Shri P. K. Kumaran: Our primary concern is to make the drugs available very cheap for our people. What, in your opinion, are the factors which keep prices of medicines in India very high, and what do you think we should do to bring down the prices of medicines in India, because even the international price will be very high in the context of the living standard which obtains in India?

Mr. Curt Engelhorn: This is a very difficult question to answer. As far as patents are concerned, I believe they are only one factor. Another very important factor that tends to increase the price of any product is the volume of its production. If you protect an invention or a process by a patent, what you get is a concentration of the product in one hand which would mean an increase in volume in this particular hand. This would tend to bring down prices because volume is a very important consideration.

Another problem in your country, as far as I know, is the fact that the chemical industry is in the beginning of its development. Intermediates and raw materials are being produced necessarily on a comparatively small scale. For instance, in the case of our own production, it was several months ago that a department of the Government investigated our pricing policy without criticising it, seeing that the production cost of Chloramphenicol was may be three times of that in Germany. I think due to devaluation it has now dropped to about twice the price in Germany.

Shri A. T. Sarma: In your statement you recommend 15 to 20 years, but in section 53 there is a distinction in our Bill—14 years for general products and 10 years for drugs. Do you agree that this distinction is required?

Mr. Curt Engelhorn: No, we do not think there is any reason why this discrimination should be made.

Shri A. T. Sarma: Will you kindly cite the names of developing countries that have prescribed 20 years in their legislation?

Mr. Curt Engelhorn: Dr. Scholl tells me that among them France and certain South American countries have provided protection for 20 years. Columbia, for instance, has 10 years with an option to increase by another 10 years.

Shri A. T. Sarma: Apart from your valuable suggestions for which we thank you, do you consider that the Bill will improve research and industrial development in India?

Mr. Curt Engelhorn: The old Indian law, from our point of view, is quite satisfactory.

Shri R. P. Sinha: The witness has said that Indian prices are cheaper than international prices for certain drugs he has mentioned. On the other hand, we have been told that Indian prices are higher than international prices. The witness has also said that the cost of production of a commodity is higher when the scale of production is low. I take it that the scale of production in the United States must be very high. Then, a patent is nothing but the grant of a monopoly, and whenever there is a monopoly, there is a tendency to keep the price high. How do you reconcile all this, that the price in India is cheaper although the cost of production of the basic drug is higher?

Shri V. M. Chordia: I want to supplement his question by quoting what the Kefauver Committee has said:

“India which does grant patents on drug products, provides an interesting case example. Prices in India for the broad spectrum antibiotics, Aureomycin and Anchromycin, are among the highest in the world. As a matter of fact, in drugs generally, India ranks among the highest priced nations of the world—a case of inverse relationship between per-capita income and the level of drug prices.”

Mr. Curt Engelhorn: I can add very little to that because I cannot improve upon those figures. I understand you have your organisation of producers in India who should be able to answer this question and give you very detailed figures on the

prices of drugs in India as compared to foreign countries. I shall try to answer about the inconsistency.

Shri R. P. Sinha: Is it because of philanthropy on the part of manufacturers that the prices in India are kept low here?

Mr. Curt Engelhorn: It is a matter how you look at it.

The purchasing power of the public in India is comparatively low. Therefore, in order to increase the volume you may have to drop your prices. In our case, we are collecting no royalty. This again was not philanthropy but for some reason or other we did not get the permission to collect royalty. In spite of that we decided to put our entire process, with its knowhow and everything, at the disposal of the joint venture in India, the reason being that it is a joint venture and we wanted to make it as profitable as possible. I think the answer why prices in India can be lower sometimes than in other countries is to be seen in the fact that the manufacturer has the alternative whether he wants to increase the volume and drop the prices or whether he wants to have a small volume and keep the prices high. We all know that small items in a company's drug line sell at very low volume and produce only losses because they cost more than they can ever bring in the way of profits (earnings).

In Germany, we have invested quite a bit of research and development work into developing this process for the manufacture of chloramphenicol. In Germany the price level of antibiotics in general and of chloramphenicol in particular is competitive because we are not the only producers of chloramphenicol. There is one competitor. Quite frankly speaking, it must be the object of any merchant to try to get the highest possible price. To get the least possible price is very simple. A man in commercial operation is paid for it; that he sells the

goods in large quantity, and at as high as possible. Otherwise he is not a good salesman. In this particular case, chloramphenicol, in Germany and in certain other markets, is quite a profitable item, and as far as our German company is concerned, it is one of the products that provides a backflow of money for the money spent on research and development. Research and development in pharmaceuticals is a discouraging story in so far as so many attempts are being made; the promising things when followed up do not lead anywhere; they lead to failure. So, a large effort has to be made. I do not hesitate to tell you that our company spends approximately 10 million DMs on research. It is a substantial figure. If I may add, it must be quite clear that all the failures have to be paid for by the success. The money has to come from some where.

Shri R. P. Sinha: We are anxious to develop our economy and our industries, particularly and pharmaceutical industry. The witness has some experience of our market and our population. He has gone through the provisions of this Bill that is before us. Could he tell us the specific provisions in the Bill that will stand in the way of inflow of foreign capital and foreign technology from West Germany?

Mr. Curt Engelhorn: I will just summarise what we have said in our memorandum. Section 47: product by process protection should be clearly established. Shift of the burden of proof should be provided for. Without the shift of burden of proof the infringement cannot be proved and the patent will be without meaning. This has to be made quite clear.

Section 48: according to our interpretation, it has given broad, sweeping powers to the Government to authorise imports without compensation and appeal. Section 53: we believe that 10 years from application is too short.

manufacturer it would come close to Rs. 1600 due to the factors I have mentioned before like high price of intermediates. We have been getting nitric acid for our plant in Bombay from an Indian ammunition plant. This cannot be supplied any more. We cannot get concentrated nitric acids which we want. So, we have to build a nitric acid concentration plant because we have to buy 70 per cent nitric acid and concentrate it. This will mean increased cost of production.

If you bear with me, I will give an example. Suppose there is a production of 1000 units of some drug at a cost of Rs. 1000. It comes to Re. 1 per unit. This manufacturer decides to increase the production and he increases it to 1500 units. He calculates and finds that the extra 500 units had cost him only Rs. 200 to produce because he could use the same building, same machinery, etc. It comes to Re. 0.4 per unit. He can drop his price and sell the 1500 units at an average price of Re. 0.8. Or he can sell all the 1500 units at Re. 1 per unit and make excess profit. Or, he can sell the extra 500 units at Re. 0.4 per unit somewhere in the world market. That will depend on the particular situation. Italians have been doing like that; they have been selling it somewhere far away from Italy at the price of Re 0.4 per unit in my example. Then the demand for the product goes up and he has to sell 2000 units. This time he calculates and he finds that the extra 500 units had cost him Rs. 7 per unit. It is quite realistic, because he had to build a new building, acquire new machines, etc. Now if he has to sell it at the average price of Re. 0.8 he may have to close his shop. The new average for his production will be more than Re. 1 per unit. I am just trying to explain the risk that anyone has to face.

Shri V. M. Chordia: Anyway, the difference was high. How far your

example will apply to this, I cannot say. My second question is, you talked about expenditure on research and gave some figures. May I know what percentage of your total turnover is spent on research?

Mr. Curt Engelhorn: My company spend on research 9.5 per cent.

Shri V. M. Chordia: What are the provisions regarding appeals in case of disputes?

Mr. Curt Engelhorn: Appeal can be made, in the cases that have been mentioned here, to the lower courts and from there to, what the Americans call, the district courts.

Shri V. M. Chordia: You have no separate judicial tribunal?

Dr. Scholl: For all questions relating to patent applications, patent revocation, compulsory licence and so on there is a High Court consisting of three or four members and from this court appeal can be made to the Supreme Court, which is the Supreme Court for all our country.

Shri K. V. Venkatachalam: This High Court deals only with patent cases?

Dr. Scholl: Yes. Its official name is federal "Patent Court" and it deals with only patent questions for all our country.

Shri V. M. Chordia: If a person gets many processes for a product patented and uses only a few of them, what is the provision in your law to stop this abuse?

Mr. Curt Engelhorn: Firstly, I must say that this is not an abuse. An inventor has to see that he gets his process or invention protected at an early date, because as things stand the only criterion to find out who is the original inventor is that of time. So he must more or less rush to the patent office and apply for a patent. Later on he finds that it has not suffi-

cient economical value to justify a capital investment. So it is never worked. That is the reason why 85 per cent of the patents registered in Germany are not being worked. I do not think any provision is necessary to worry about that, because if any of these 85 per cent of un-worked patents would find interest of someone he will go to the holder of the patent and that man will, in most of the cases, be very happy that finally some use has been found for a patent which he thought was of no value.

Shri B. K. Das: In that case he can get a compulsory licence.

Mr. Curt Engelhorn: It has to be in the public interest. If the man who seeks a licence cannot get a licence from the patent holder, if he can prove that it is the public interest he can apply for a compulsory licence.

Shri Shyamnandan Mishra: It is not quite clear to me what kind of regulatory mechanism operates in respect of prices in Germany. May I know whether the Government exercises certain powers to regulate the prices or the question of prices is left completely to the operation of the market forces?

Mr. Curt Engelhorn: Generally speaking, I would say, it is left completely to the market forces. The reason behind it is that we feel in, by far, most of the cases there is competition. This competition is either due to the fact that there are a number of manufacturers or the supply is more than sufficient. But even in the case of patents, I think one must realise that there are very few patents of such basic importance and such basic nature that the products produced with the help of such patent are practically without competition. But there is no price regulation mechanism in Germany. We do not believe in that. We feel that the free forces regulate the prices sufficiently.

Dr. Scholl: There is only one provision in our criminal law against

usury prices. This provision is not only against patent prices but covering all trade.

Shri Shyamnandan Mishra: What is the ratio of foreign patents to German patents? How many foreign patents are based on researches carried out inside Germany? I am asking this question particularly because the problem of finding employment for our scientists on research activities is an extremely acute one in our country. If research activities are carried out elsewhere and we simply take those results, we do not have this employment problem solved.

Mr. Curt Engelhorn: In 1965, 57.4 per cent of the patent applications were made by Germans and 42.6 per cent by foreigners.

Mr. Chairman: Out of the foreign patents granted, how many of them were on the basis of research work done in Germany?

Mr. Curt Engelhorn: You mean research work done by other people in Germany or paid German scientists for doing that work?

Shri Shyamnandan Mishra: If research activities are carried out inside Germany then German scientists will have an opportunity for getting employment in those research activities. If those research activities are carried out in the United States, then your research workers will not have any opportunity for employment. That is a very acute problem in our country and that is why I am asking this question.

Mr. Curt Engelhorn: As far as Germany is concerned, I think the percentage of these patents is extremely low. Most of the foreign companies that do research in Germany do it through German subsidiaries and the patents belong to the German subsidiaries. So, they are in the category of patents belonging to the Germans.

Shri Shyamnandan Mishra: I am not asking about the exploitation of the

patent but the birth of the patent as a result of the research activity. How do these patents come into being? Are these as a result of research activities in Germany or outside Germany?

Mr. Curt Engelhorn: 42.6 per cent of the patents are the result of research work done in foreign countries and the rest in Germany itself.

Shri Shyamnandan Mishra: What are the factors in Germany which are acting as a deterrent to the inventions coming to Germany? Are there any difficulties or obstacles?

Mr. Curt Engelhorn: In fact, too many are coming to Germany. Foreign investment in Germany is rather heavy. You may have heard that France has taken a number of steps in order to discourage substantial American investment in France. That is a problem faced by many expanding economies of Europe. The climate for investment in these countries is good. As far as the exchange of patentable or even unpatented know-how is concerned, very good base has been established. There is rather free flow of information. We are working together with a number of American companies and have free exchange of data and experience.

Shri Shyamnandan Mishra: Similarly there could be problems of a different character altogether for under-developed countries. So, they might take certain precautions with regard to patents. Just as France and your country are confronted with one problem, we might be confronted with another problem to face which we might justifiably take some precautions by providing certain safeguarding provisions in our Patent Bill.

Sardar Daljit Singh: Is there any provision for acquisition of inventions in your country? If so, is any compensation paid?

Mr. Chairman: He has already answered that question.

Sardar Daljit Singh: Is there any provision in your country to control the prices of patented drugs in the interest of the common man?

Mr. Chairman: He has answered it just now.

Shri Kashi Ram Gupta: So far as fundamental and basic research is concerned, is it mostly done by the pharmaceutical industry or Government institutions are also doing it?

Mr. Curt Engelhorn: Undoubtedly, Government institutions, universities and so on are also doing a substantial volume of research.

Shri Kashi Ram Gupta: What about basic and fundamental research?

Mr. Curt Engelhorn: That is a matter of definition. I think one can say that more fundamental and basic research of a nature which would tend to increase man's knowledge about basic things and what occur in nature, that type of research is done mostly in State universities. A certain amount of basic research is done by the industry also. Basic research is a question of definition. After all, industrial research has to be in a very broad way but, nevertheless, it has to be aimed at the goal of developing something that will prove of value to the consumer. Our research people always tell the university professors: you have a very nice and easy life, because who is ever going to determine the pace of your work; who is going to have a yardstick for the success of your work; if you take up a project that does not yield any results, there is nobody who can really criticise you. If you happen to produce results, it is much better; you can publish lengthy papers about the experiments that have led to no results as well as experiments that have yielded results. But we in the industry are in an entirely different position. Our work has to be measured by the yardstick of success constantly.

Shri Kashi Ram Gupta: How is the scientist rewarded, so far as his share of the invention is concerned?

Mr. Curt Engelhorn: In Germany we have a law that makes it mandatory for the employer or company to give the inventor a share of the profits; not exactly profits but a proportion of the turnover as royalty.

Shri Kashi Ram Gupta: On page 2 of your memorandum you have stated:

"The patent protection granted by India heretofore has been satisfactory in principle...."

What is meant by "in principle"?

Mr. Curt Engelhorn: We wanted to say that from our point of view it seemed alright. There may be problems peculiar to India that may not be adequately solved and adequately taken care of by your present law.

Shri Kashi Ram Gupta: Then you go on to say:

"We believe, on the other hand, that we, to a large part, have a grasp of the reasons that have led to criticism and to the attempt to cope with this criticism by changing the Indian Patent Law."

Please explain this.

Mr. Curt Engelhorn: The way we understood it was that the price of patented products played an important part and that the patent was considered a monopoly that would give the inventor the opportunity to make excess profits and similar things. That was, as we understood it, the most important driving force.

Shri Kashi Ram Gupta: But, at the same time, you say that the existing law is quite all right and that the changes that are proposed in this Bill are not suitable from the point of view of India. How do you reconcile the two?

Mr. Curt Engelhorn: We believe that the problem that was to be solved, that is, of prices and excess profits and so on, should not be solved by chang-

ing the patent law. We do seek protection to the public, but by other means, for instance by antitrust legislation. The patent law should not be used as an instrument to this end.

Shri Kashi Ram Gupta: In your opinion, is there need for any amendment at all?

Mr. Curt Engelhorn: From our point of view, I would say "No."

Shri Kashi Ram Gupta: What generally is the royalty paid in Germany for pharmaceuticals?

Mr. Curt Engelhorn: That varies greatly. As far as exclusive licences are concerned, royalties of about 7½ to 10 per cent on the turnover are paid. In the case of non-exclusive licences the royalty figure would be between 5 and 7½ per cent; but, if there are other factors that decrease the value of the invention, it goes below 5 per cent.

Mr. Chairman: In Germany, I understand, inventions of articles of food and taste, medicines and substances which are produced by chemical process in so far as inventions do not concern a specific process for the preparation thereof are not patentable. Is that correct?

Mr. Curt Engelhorn: That rules out completely the possibility of growing a new grain and making flour from that and patent that. There is no patent of that. If it is not a specific process, it cannot be patented.

Mr. Chairman: You object to Government use of patents without compensation but in Germany you have got a provision for the free use of patented inventions made possible by the order of Government in the interest of public welfare.

Dr. Scholl: That is section 8, subsection (1); but in section 8, subsection (3), it says that there must be paid adequate compensation if a patent is done away with. There is no use

of patents by Government without compensation—not at all—in the German patent law.

Mr. Chairman: Some compensation has to be paid.

Dr. Scholl: Yes, in every case; and, if I may add, there is full appeal to courts.

Shri K. V. Venkatachalam: Can you tell us whether your Indian company is doing any research in India?

Mr. Curt Engelhorn: No; we are not doing research, but our plan is this. We trained a very clever Indian chemist who, I think, got some basic training here in India, came to Germany, studied at the University of Bonn and was trained in our company for, I think, 2½ years. He has done an excellent job in building up the production facilities in Bombay. The next thing that we plan to do is to equip a quality control laboratory. Of course, production control is already being done, but as a next step to finishing and packaging, we will erect a quality control laboratory. In addition to this, as an annexe, so to say, we will add a research unit which will be concerned with pharmaceutical research, that is, formulations research and so on, because for the broader pharmaceutical, medicinal research you need a large organisation and a well-balanced combination of pharmacology, toxicology clinical medicine and chemistry. Of course, to build that up, we do not have the resources as yet.

Shri K. V. Venkatachalam: You do not contemplate it in the next five years.

Mr. Curt Engelhorn: No.

Shri K. V. Venkatachalam: As regards process versus product patent, you developed chloromphenicol when Parke Davis must have had their own patent of it. If the German provision for process-cum-product patent was

not there, you would not have been able to claim a patent for your own process. Is that right?

Mr. Curt Engelhorn: Yes.

Shri K. V. Venkatachalam: So, our line of approach to this problem is basically correct?

Mr. Curt Engelhorn: You are quite right, but I think you have to offset that against the difficulties that lie in process protection. Process protection puts a considerable burden on the inventor.

Shri K. V. Venkatachalam: Quite true. But if the German law had allowed only product patent, your company would not have been able to get the patent for chloromphenicol at all. Is that not a sufficiently important argument?

Mr. Curt Engelhorn: I do not know. Even though we ourselves benefited, I would quite frankly discuss the situation with you. It came about like this. We had two chemists in our company. Parke Davis had made a disclaimer in one of their publications which said that one could not use cinamic alcohol as a starting product and they said: "We do not understand why this should not work". They started working with it and they saw that actually it did not work, but they found out very quickly—it may be by luck—a way round that. Then they did some very clever additional work and they were able to build up the molecule starting from cinamic alcohol.

Then, the question of economy of the synthesis came in and it was possible to work out this synthesis to the point where it was quite economical. But Parke Davis did also additional work on their synthesis. I think it was in the year 1958 or 1959 that we came to terms. They were sufficiently interested in our process to take a licence on that and we on the other way round. At that time, we were of the opinion that our process was superior. Looking back now, I am

very glad that we made the deal because it was not significantly superior.

Dr. Scholl: Mr. Chairman, with your permission, I would like the following to be added at the appropriate place to my evidence: "The revocation of patents under Section 15, sub-section 2 of the German Patents law is only possible if a compulsory licence had been granted before and if the said

compulsory licence had proved insufficient."

Mr. Chairman: Thank you very much.

Mr. Curt Engelhorn: Thank you very much.

(The witnesses then withdrew)

The Committee then adjourned.

1966 BY THE LOK SABHA SECRETARIAT

PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND CONDUCT OF
BUSINESS IN LOK SABHA (FIFTH EDITION) AND PRINTED BY THE GENERAL
MANAGER, GOVERNMENT OF INDIA PRESS, MINTO ROAD, NEW DELHI
1966.

LOK SABHA
JOINT COMMITTEE
ON
THE PATENTS BILL, 1965

EVIDENCE

(Volume II)



LOK SABHA SECRETARIAT
NEW DELHI

October, 1966/Kartika 1888 (Saka)

Price : Rs. 4.20

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JOINT COMMITTEE ON THE PATENTS BILL, 1965

COMPOSITION OF THE COMMITTEE

Shri S. V. Krishnamoorthy Rao—Chairman.

MEMBERS

Lok Sabha

2. Seth Achal Singh
3. Shri Peter Alvares
4. Shri Ramchandra Vithal Bada
5. Shri Panna Lal Barupal
6. Shri Dinen Bhattacharya
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28. Dr. L. M. Singhvi
29. Shri P. Venkatasubbaiah
30. Shri K. K. Warior
31. Shri Balkrishna Wasnik
32. Shri Ram Sewak Yadav

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Rajya Sabha

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- 35. Shri Babubhai M. Chinai
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- 43. Shri Mulka Govinda Reddy
- **44. Shri D. Sanjivayya
- *45. Shri M. R. Shervani
- 46. Dr. M. M. S. Siddhu
- *47. Shri Dalpat Singh
- *48. Shri R. P. Sinha.

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Peri Sastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D., Ministry of Industry.*
2. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks, Trade Marks Registry, Bombay.*
3. Shri B. N. Atrishi, *O.S.D., Ministry of Industry.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

1. Shri S. K. Borkar, *Drug Controller of India, Ministry of Health.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

*Ceased to be members of the Committee w.e.f. 2nd April, 1966 on their retirement from Rajya Sabha and were reappointed by Rajya Sabha on the 7th April, 1966 except Shri Dalpat Singh who was reappointed on the 13th May.,

**Appointed on the 17th May, 1966 vice Shri T. N. Singh resigned.

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MINUTES OF EVIDENCE GIVEN BEFORE THE JOINT COMMITTEE ON THE PATENTS BILL, 1965

Friday, the 8th July, 1966 at 09.40 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Panna Lal Barupal.
5. Sardar Daljit Singh.
6. Shri Basanta Kumar Das.
7. Shri V. B. Gandhi.
8. Shri H. K. V. Gowdh.
9. Shri Kashi Ram Gupta.
10. Shri Madhavrao Laxmanrao Jadhav.
11. Shri Braj Behari Mehrotra.
12. Shri Naval Prabhakar.
13. Shri A. T. Sarma.
14. Dr. C. B. Singh.
15. Shri Ram Sewak Yadav.

Rajya Sabha

16. Shri Arjan Arora.
17. Shri Babubhai M. Chinai.
18. Shri Vimalkumar M. Chordia.
19. Shri D. P. Karmarkar.
20. Shri P. K. Kumaran.
21. Shri Shyamnandan Mishra.
22. Shri Dahyabhai V. Patel.

23. Shri Mulka Govinda Reddy.
24. Shri Dalpat Singh.
25. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

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2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Neo-Pharma Industries, Bombay.

Spokesmen:

1. Shri N. L. I. Mathias, *Director.*
2. Shri A. C. Mitra.

II. Haffkine Institute, Bombay.

Spokesmen:

1. Dr. H. I. Jhala, *Director.*
2. Dr. C. V. Deliwala, *Asstt. Director.*

III. Mr. J. F. Monnet,

Chambre Syndicale Nationale des Fabricants de Produits Pharmaceutiques,
88, Rue de la Faisanderie, Paris—16.

I Neo-Pharma Industries, Bombay.
Spokesmen:

1. Shri N. L. I. Mathias, *Director.*

2. Shri A. C. Mitra.

(The witnesses were called in and they took their seats).

Mr. Chairman: The evidence that you give is public and it will be printed and published; it will be circulated to all the members and will also be laid on the Table of the House. Even if you want anything to be treated as confidential.....

Shri A. C. Mitra: We have nothing to be treated as confidential.

Mr. Chairman: ...it will be printed and published and will also be distributed to members.

We have received your Memorandum and it has been circulated to all the members. If you want to stress any point, you may do so and thereafter members will ask questions.

Shri A. C. Mitra: I have come here particularly at the request of the company to explain to you the circumstances which have led the Neo-Pharma to this position....

Shri R. P. Sinha: We would like to know what is Neo-Pharma.

Shri A. C. Mitra: Neo-Pharma is a company.

Shri K. V. Venkatachalam: Say something about that Company.

Shri A. C. Mitra: I represent Neo-Pharma Industries Private Limited. It is a pharmaceutical company manufacturing, among other things, for intending to manufacture a very important life-saving drug known as Chloramphenicol, which is the Chemical name for Choloromycetin, which is so essential for the health and well-being of the people of our country.

We were given an industrial licence under the Industries (Development & Regulation) Act on the 6th February, 1960 and we had been asked to start the manufacture of this within six months. Nearly six years have elapsed, but nothing is happening for the very simple reason that Parke Davis

have, throughout this period, taking full advantage of the lacuna in the Patents & Designs Act as it stands today, harassed this company by not giving us the licence and when we applied for a compulsory licence, they took us all over the line, from court to court and applications after applications, so that today, although the compulsory licence has been issued, an appeal has been preferred and a stay order has been obtained. The result, therefore, is that, although our company has spent lakhs of rupees in acquiring the technical know-how, in setting up factories and in acquiring lands, nothing can be done because of the dilatory tactics adopted by a foreign patentee taking full advantage of the provisions of the Patents & Designs Act. I must say that I have come here to impress upon you, if I can, the advantages of the provisions of the new Bill. I have come to support it. I am told that many persons have come and expressed their views on the Bill. I have not come here for that purpose, but I am merely here to tell you, as a concrete case, the difficulties under the old Act that we are experiencing and how the difficulties could be obviated by the provisions of the new Bill. I may give you full details just to explain to you, or to give you a full picture, as to how the delay has taken place and what are the reasons for the delay. Parke Davis have this patent; they have actually got four patents..

Mr. Chairman: You have narrated this in detail in your Memorandum.

Shri A. C. Mitra: If you have read it, I have nothing further to add except that you will see from the way in which they have gone on, the whole object has been to delay the working. The result is that, at the moment, there are two companies—one German and the other, American—who are intending to create between themselves a monopoly. I shall tell you how.

Mr. Chairman: Which is the German firm?

Shri A. C. Mitra: Boehringer.

Between them, they are manufacturing a good percentage of this life-saving drug and their object in preventing us from coming to the field is this: when the country is urgently in need of the drug and if we are not manufacturing, they will say, "increase my quota and give us further licence to manufacture more". The result would be that ultimately they would create a monopoly between themselves—Parke Davis and Boehringer. These two people would be the monopolists of this life-saving drug.

We have entered into a collaboration agreement with an Italian concern called Archifar. They have got the technical know-how and it is their technical know-how that we are now exploiting. These people first of all filed an infringement application saying that Archifar are nothing more than our Principals and since Archifar are the infringers, we are also the infringers. And all along the line they have been filling their appeals in the Calcutta High Court with the result that the collaboration agreement between us and Archifar could not be given effect to. Finding the difficulty we filed a petition under Sec. 23c.c. for a compulsory licence and when the compulsory licence was applied for and after going into the matter the Controller said, 'Let us see what terms you are agreeing to to give the licensee' Parke Davis said 'Nothing of the kind. You first of all decide whether you are going to give the licence or not. Then I will give you the terms.' On that they went upto the High Court again and so on. All these details have been given in our memorandum. I can read it if you so desire.

What I am emphasizing is that under the old Act it is open for a person who is bent upon delaying to do so. The present position is that we have got a compulsory licence but they filed an appeal and a stay order obtained so that the compulsory licence is in cold storage and nothing

can be done. The position, therefore, under the present Act is that it is possible for a foreign patentee to harass an indigenous manufacturer in such a way as to create a monopoly in the meantime in the market so that if and when after 10 years we do start the manufacture, the market is already full of these monopolists' goods and they are in a far better position to compete than us who are new-comers in the field. The whole object of the Bill is that these vital industries should be in Indian hands. I understand, subject to correction, that in Japan none of this nonsense is tolerated. They buy out the technical know-how in most cases and that is an end of the matter and practically every single industry is a Japanese industry, not like foreigners coming here and monopolising over here and dictating terms. Government is anxious that these drugs should be manufactured by India and the foreign patentees controlled. Here what we see is that the foreign patentees dictate to our country as to what is to be done and how it is to be done and in the meantime take advantage of the lacuna in the law and the law courts to prevent the avowed policy of the Government, namely the Indianisation of the industry manufacturing these life-saving drugs.

My only submission on this Bill is that the provisions relating to the grant of compulsory licence ought to be carried out with immediate effect so that when the compulsory licences are in fact granted, then there may be a provision made in the present Bill for the Controller giving *ad hoc* compulsory licences and even before hearing the opposite party. I do not say that hearing should not be given. That should be given. There is provision in the Bill for hearing even on the patents but, at the same time, the procedure should not be persisted in such a way that dilatory tactics will be adopted by the patentees.

Mr. Chairman: Would you require this Committee to fix some time limit for granting the compulsory licence?

Shri A. C. Mitra: A time limit can of course be fixed. But the difficulty will always be: for instance, there can be no time limit for a judgment to be pronounced by a court. I have known of cases in certain High Courts, where arguments are over long ago....

Mr. Chairman: But this Bill rules out appeal to Courts. Do you prefer that?

Shri A. C. Mitra: I prefer that.

Mr. Chairman: Would you prefer the setting up of a Patents Tribunal?

Shri A. C. Mitra: I would suggest that the Bill should be left as it is subject to this: that the Central Government, when deciding the appeal, can appoint an ex-High Court Judge together with qualified assessors to go into the case.

Mr. Chairman: Suppose this Committee makes a recommendation that there should be a special Tribunal which should hear only patent cases and dispose of the cases within a particular time limit—what are your views on this?

Shri A. C. Mitra: In England there is what is known as Patents Tribunal functioning. At the moment something like that could be done. But I would suggest that if the Patents Tribunal is a sort of miniature High Court, the same thing arises. I will give you an illustration. A compulsory licence is given to us. I go up to the Patents Tribunal. It stops and gives a stay and then the usual paraphernalia of your submitting your part of the statement and their submitting their reply and so on—the whole gamut of the proceedings take place before the Tribunal and it will ultimately be the same. I am aware of the fact that it does not look nice that a person's right should be interfered with except by the judicial process but what is to be done? Having a Patents Tribunal is all right, but if you put in a Tribunal, the same

thing would happen as it happens in a High Court.

Mr. Chairman: May not, when it is specially set up for that purpose and a time limit is also fixed.

Shri A. C. Mitra: If you indicate that the case should be disposed of within a certain time, it is only a pious wish. Supposing it is not done, what is the sanction?

Mr. Chairman: But the other man also must have the satisfaction that it is a judicial adjudication, judicial hearing. Don't you think so?

Shri K. V. Venkatachalam: Supposing the position is reversed, would you like a position in which you do not have the chance at all to explain your situation?

Shri A. C. Mitra: I am not saying that at all, but look at the facts of my own case.

Shri K. V. Venkatachalam: Don't judge on a single case. Take the situation in a larger context.

Shri A. C. Mitra: Speaking as a lawyer and brought up and trained in law, it is the most unpleasant thing to say that a judicial approach should not be done. That is true, but I am merely pointing out this to you to say that the judicial approach when it is honestly done, *bona fide*, it is all right, but there are ways and means left to unscrupulous patentees to delay matters as has been done in this case.

Mr. Chairman: That is why we are suggesting a Special Tribunal.

Shri A. C. Mitra: If you do provide a Patents Tribunal and fix a time limit, then a further provision must be made that on the failure of its being disposed of within the time limit, certain consequences will follow: i.e. the order of the Controller will remain—something of that kind should

be there. Otherwise mere mention that it should be disposed of within 3 months will not help one party or the other.

Shri V. M. Chordia: Have you got any experience of the working of the Copyright Tribunal. There the cases are disposed of quickly and there is no delay.

Shri A. C. Mitra: May I make one submission: so far as Copyright Act is concerned, very few people resort to that. As a matter of fact, I have to tell you frankly this is a Tribunal which is going to be resorted to by a large number of people.

Mr. Chairman: You may also know that an appeal will be provided to the Supreme Court only on points of law, not on facts.

Shri A. C. Mitra: In other words what you are suggesting is that there may be only one appeal from the order of the Controller to the Tribunal.

Mr. Chairman: And a second appeal to the Supreme Court only on points of law.

Shri A. C. Mitra: You cannot by any legislation destroy the provisions of Art. 136. That is a constitutional power granted to the Supreme Court.

Mr. Chairman: Supreme Court does not enter into the question of time limit.

Shri A. C. Mitra: Under Art. 136 the powers of the Supreme Court to entertain and hear appeals are very wide.

Mr. Chairman: That is true. But only on questions of law an appeal shall lie to the Supreme Court.

Shri A. C. Mitra: Even an inference from the facts is a question of law. Supreme Court's powers under Art. 136 cannot be touched.

Shri V. M. Chordia: May I know how many patent appeals are filed in the High Court on an average?

Shri A. C. Mitra: I have not got the statistics before me.

Shri V. M. Chordia: It will be easier if there is a Patents Tribunal.

Shri A. C. Mitra: I am not suggesting that the tribunal should not be appointed. Of the two evils, if I may say so—High Court and the Patents Tribunal—the Patents Tribunal is the better one.

Shri V. M. Chordia: What is the best?

Shri A. C. Mitra: The Central Government.

Mr. Chairman: But there will be objection because the Central Government is also the executive authority. Some judicial pronouncement is necessary.

Shri A. C. Mitra: For example, the Board of Revenue, also exercise appellate powers and in important cases, technical people are also taken in and their advice is taken. The rules may provide for the hearing of the appeals by the Central Government. It will come to the same thing.

One other point is that a time-limit should be fixed within which they must dispose of the appeals. Another point is that while many people, who are dealing with nothing but patent law, say that this present Bill is really an excellent Bill, still they say that the new Bill will entail a lot of administrative work in the patent office and so the staff and other things should be increased.

Mr. Chairman: Yes, we will consider that.

Shri A. C. Mitra: These are the points. The provisions of the Bill have become really necessary and the present case is a concrete example

where the licence was issued within six months, but even after six years nothing has been done. It is possible, if this state of affairs continues, for a patentee to create a monopoly; as in fact they are creating. To-day there is a demand of about 90 tons for this life-saving drug. They are manufacturing at the moment about 30 tons. Formerly they were given licence for about 10 tons. Then, after successfully keeping out others from the field, they come to the Government and say "we are in a position to manufacture more; give us additional tons." Gradually between themselves and this Boehringer, they are trying to create a monopoly in this field.

Mr. Chairman: If we provide six months for the grant of compulsory licence by the Controller and another six months for the patents tribunal to dispose of the appeal, will it satisfy you?

Shri A. C. Mitra: It all depends; in the case of granting of compulsory licence, six months is all right. But the point is, supposing the person wants time.

Mr. Chairman: He should be refused; he should come prepared with all his documents and other things.

Shri A. C. Mitra: You should empower the Controller to give directions in such a way that the entire matter should be disposed of within six months. That would be very very helpful. Similarly if we could give a direction that the patents tribunal, if and when constituted under the Act, should also dispose of the appeal within the specified time, it would be very helpful.

One small point: Suppose a licence is granted to a company and there is an appeal. I was suggesting that during the pendency of the appeal, he should be allowed to go ahead. Now, would you stop entirely the operation of the compulsory licence, or would

it be the other way round that once the Controller has thought it fit to grant the licence, he can go ahead, subject to any modifications that may be made later on by the Controller?

Dr. C. B. Singh: How can that be made?

Shri A. C. Mitra: That is in the Bill. I take the risk. When the licence is granted, I go ahead with it. If the licence is rejected, I take the risk. Otherwise I would have to start again after six months.

Mr. Chairman: We will consider that.

Shri A. C. Mitra: It should be optional for the person to do so, and there should not be any restraint.

Shri R. P. Sinha: Is there any similar provision in any other Act of the Government of India?

Mr. Chairman: Please see Section 88(4): "The Controller may at any time before the terms of the licence are mutually agreed upon or decided by the Controller, an application made to him in this behalf by any person who has made any such requisition as is referred to in sub-section (1), permit him to work the patented invention on such terms as the Controller may, pending agreement between the parties or decision by the Controller, think fit to impose." It is there.

Shri A. C. Mitra: Yes, it is there. But that is with regard to the Controller; I was suggesting it for the appeal also.

Mr. Chairman: We will consider it.

Shri A. C. Mitra: There is one more point which I would like to bring to your notice. Critics of this Bill, I am told, have said that the result of this Bill would be that anybody can come forward and whether he is capable of manufacturing or not, he gets the licence and goes on with it. There is no point in this criticism for this rea-

son that in these cases of essential drugs, licences are granted under the Industries Development and Regulation Act and the Drug Controller takes into account the quantity he proposes to manufacture, the target for the next plan, the demand for it and so on and also sees whether the applicant has got the necessary technical know-how resources, etc., before granting the licence. So it is not that anybody can come forward and get the licence.

Mr. Chairman: One of the objections is that it will scare away foreign investment.

Shri A. C. Mitra: If the foreign patentee says that unless he gets full monopoly rights in India, he will be scared away, we will say "bye bye" to him; we will do without him. We will copy, we will infringe his patent; we will do it in the national interest. We had enough of these threats.

Mr. Chairman: Another objection is that it will not promote scientific research in this country, but will retard scientific research.

Shri A. C. Mitra: In Italy—I am speaking subject to correction—nobody bothers about patents. They keep on merrily infringing it and yet the research has not stopped. This threat that unless they get a monopoly they will not come, will always be there. I can assure you that they won't be scared away. Take this particular case. It was given in 1948, I remember. Eighteen years have passed and still they won't give us the licence. (There have been some extensions in this case.)

Dr. C. B. Singh: May I know what is the total out-turn of your Pharmaceutical preparations?

Shri A. C. Mitra: For what?—

Dr. C. B. Singh: For the drugs you are producing.

Shri A. C. Mitra: 1½ crores—that is the out-turn of the drugs that we have manufactured.

Dr. C. B. Singh: Out of this 1½ crores, what is the proportion of patented and unpatented drugs?

Shri A. C. Mitra: I do not think that can be given off hand.

Dr. C. B. Singh: Out of this, how many are patented drugs. You can give an approximate number.

Shri A. C. Mitra: I am told, 20% are patented.

Dr. C. B. Singh: Are you sure it is 20%. I would like you to confirm this point. It is very important.

Shri A. C. Mitra: If I had prior intimation, I could have given you the exact figure. I shall send you the information. This is an approximate idea.

Dr. C. B. Singh: When you came into conflict with Parke Davis, did you know that they were holding the patent right for Chloram-phenical in India.

Shri A. C. Mitra: Yes.

Dr. C. B. Singh: Knowing that, how did you come to terms with the Italian firm for the know-how?

Shri A. C. Mitra: Archifors are manufacturing this drug, and according to the agreement between us, they have to supply us the technical know-how. We have throughout been told that it is a different process, that the Italian process is different. Later on it transpired that they have got the same process. It was then that we asked for a licence from Parke Davis. They will not give us except on certain ridiculous terms.

Dr. C. B. Singh: Without proper examination of the case, you came to terms with the Italian firm and that is why the difficulty arose

Shri A. C. Mitra: No. This is not correct. The Italian firm promised to produce Chloramphenicol with their own process and we had no idea what that process is until they start manufacturing. Then when Parke Davis said that you are infringing my patent, we asked Parke Davis to give us the licence to manufacture it under their patent. To that, they refused. Then we had to go in for a compulsory licence.

Dr. C. B. Singh: After having spent so much money, did you try by your research work to find out an alternative method to produce this drug?

Shri A. C. Mitra: If it had been so easy in India to have found out an alternative method, there was no point in running after Parke Davis.

Dr. C. B. Singh: For your information, a German firm did that.

Shri A. C. Mitra: Germans did not do that. What they did was they had an addition here and an addition there and with their huge resources and scientific skill, they made minor variations here and there and certain additions. This they have again patented and now between the two—Boehringer and Parke Davis—each one has given licence to the other. Between the two, they have got a monopoly.

Dr. C. B. Singh: Did you try to come to terms with Parke Davis Company so that they may give the licence to you?

Shri A. C. Mitra: My instruction are, we have approached them, but they refused to give us the licence.

Dr. C. B. Singh: Did you try to come to terms with them? It was a matter for negotiations.

Shri A. C. Mitra: My instructions are, we have had long negotiations with them but the terms were so rigid and so impossible that we could not possibly agree to them.

Dr. C. B. Singh: Can we have the terms?

Shri A. C. Mitra: There were discussions both in Bombay as well as outside with regard to the terms of the licence. Ultimately they did not give us any licence.

Dr. C. B. Singh: Will you be able to give this information about the terms? That is very important, because we have got to go into details as to what terms you offered and what they refused.

Shri R. P. Sinha: Negotiations are no longer secret. The matter is before the High Court where everything is open.

Shri N. L. I. Mathias: We did negotiate with them for the terms and for giving us the licence for the production of Chloramphenicol in this country, but in spite of our attempts both in India with the local management of Parke Davis as well as the parent company in Detroit, USA, they did not make any response to our attempts. Negotiations were rebuffed by dilatory tactics. When we approached the local Managing Director, we were informed that he has no permission to negotiate. When we wrote direct to Parke Davis, Detroit USA, the parent company, they said we will have to discuss with the local company. And this went on for more than a year or two and ultimately in despair we had to go ahead with the Italian collaboration. There was no way of coming to any terms, any type of understanding or obtaining any reasonable settlement. Even our approach for any reasonable terms was being rebuffed. They did not offer any tangible terms. They would say: We shall discuss the matter; we are considering the matter; you should have negotiations with our local company and local company directs us to Detroit, and from Detroit back again here. And that was the process which went on for months and months. If I recollect correctly it went on for 2½ years. In the meantime, we were pressed by Government to tell them the concrete steps that we have taken for the implementation of the licence. We had no answer to give. We had to make

headway. We had to go ahead. The only alternative that was left to us was to go in for an application for compulsory licence, because only through this process, could we make any headway.

Shri R. P. Sinha: What happened to compulsory licence?

Shri N. L. I. Mathias: Compulsory licence has been very recently granted to us. Not being satisfied with all the correspondence and personal discussions in Bombay with the local Managing Director, took the trouble of going all the way to the United States. I went to Detroit expressly for this purpose of negotiating with their Directors and home office and I met the Deputy Chairman and discussed this matter. It was all nothing but just hearing you, trifling with the entire affair, extending to you all hospitality and packing you back home. This is all that was there. They said: we shall write to you. But writing never came for months. There was no response except that we shall discuss the matter during the next visit of our Managing Director to Detroit—the matter will be discussed and things were left at this stage.

Dr. C. B. Singh: If you had a similar patent in America what will you like? Would you like some one else to draw a copy of it without giving you proper compensation?

Shri N. L. I. Mathias: The question of not giving proper compensation does not arise. We are most willing to give adequate compensation but they are adopting dilatory tactics and trifling with the issue.

Dr. C. B. Singh: With an out-turn of Rs. 1½ crores what is your research set-up?

Shri N. L. I. Mathias: We have none. I can also say that most of the companies in India do not have their own basic research set-up. It requires a lot

of resources. We are relatively medium-sized companies. We cannot compare ourselves with big companies like Parke Davis and such other European companies.

Dr. C. B. Singh: Even with your out-turn of Rs. 1½ crores, when you were looking forward to a high profit, it was time for you to do something original in this line.

You have got hardly anything—is that your reply?

Shri A. C. Mitra: We do not have any basic original research set-up but we have certainly developed certain products in the country.

Shri Arjun Arora: You mentioned about some Italian collaborators. Have your Italian collaborators manufactured these medicines?

Shri A. C. Mitra: Yes, our Italian collaborators do manufacture and the same is sold in Italy. They are one of the biggest manufacturers of Chloramphenicol in Italy.

Shri Arjun Arora: Do you have any idea of price of this drug that is prevalent in Italy and the price which Parke Davis charge here.

Shri A. C. Mitra: I have no information at the moment.

Shri Arjun Arora: Could you collect and send it.

Shri A. C. Mitra: Well we will try and send it.

Shri Arjun Arora: You mention about Japan preventing the foreigners from hindering Japanese entrepreneurs.

Shri A. C. Mitra: I merely pointed out that in Japan, as far as I know, they buy the complete technical know-how and practically not a single foreigner without Japanese collaboration is allowed to set-up industries in Japan with regard to these certain essential types.

Shri R. P. Sinha: Are you sure of the facts when you say so?

Shri A. C. Mitra: By and large, I am told, that is the method that they are resorting to.

Shri Arjun Arora: You suggested that there should be a time-limit to decide a dispute. What time-limit do you think will be reasonable?

Shri A. C. Mitra: It all depends on the nature of the dispute. If the dispute is about a small matter it can be decided quickly; if it is a complicated one it may take long time. But six months would be maximum that should be allowed and I am sure it can be done.

Shri Arjun Arora: Will you also prefer that there should be no power to stay the implementation of the decision of the Patents Tribunal by any court.

Shri A. C. Mitra: You cannot whittle down the power of the Supreme Court under Article 136.

Shri Arjun Arora: Does not the power of stay come handy to the patentee?

Shri A. C. Mitra: Well if they apply Article 136 and the Supreme Court grants stay there is nothing you can do here. But all depends on the good sense of the Supreme Court whether they would grant the stay or not.

Shri Arjun Arora: Could you give us an idea of the amount of profit that Parke Davis may have earned during the period that they have been keeping you busy in litigation and preventing you from manufacturing?

Shri A. C. Mitra: This is a question which Parke Davis alone can answer. But this much I can say that the demand is so tremendous for this very important drug in our country and compared to the low purchasing power of our people, Sir, the price seems to be even now fairly high.

Shri Arjun Arora: Could you give us an idea of the sale price per unit of Parke Davis and your approximate sale price?

Shri N. L. I. Mathias: Sir, initially we did manufacture this Chloramphenicol in our factory until we were stopped. We have now sold out that stock. We were selling it at a much lesser price than Parke Davis.

Mr. Chairman: What are the exact prices—theirs and yours?

Shri A. C. Mitra: One capsule costs 75 paise, whereas the cost of a capsule which we were manufacturing and selling from out of the stock we had got still, came to 5 annas; it has now come down to 4 annas, viz. 25 paise.

Mr. Chairman: On the same units?

Shri A. C. Mitra: 12 capsules of 250 mg.

Shri Arjun Arora: Your colleague mentioned about his visit to Detroit. Had he got the impression that they were not interested in granting him a licence to manufacture in India?

Shri A. C. Mitra: Yes, that is his impression. I will ask him to speak.

Shri N. L. I. Mathias: The general impression, I will ask him to speak. Discussions with Parke Davis in Detroit was that there were no *bona fides* in their so-called negotiations with us. They talked to us just out of politeness.

Shri Babubhai M. Chinai: Are you in favour of a total abrogation of patent law?

Shri A. C. Mitra: It is a very important law. It not only protects foreign inventors, but it also gives protection to us.

Shri Babubhai M. Chinai: On every such occasion where the Government has come out with a Bill wherein the power of the Executive is final and

there is no judicial tribuna^l or any Board or High Court which can be approached, people from the profession to which the hon. speaker belongs, have always objected that there should not be the final authority in the Executive. Will the hon. speaker enlighten us about his views?

Shri A. C. Mitra: The question, Sir, is that our knowledge is limited to certain essential foods and drugs vital to the life of the community. I do not want to speak about any other matter which is not so essential. This is number one. Secondly, as a lawyer on the Bar, the Executive being armed with great power is abhorrent to the judicial mind. But I cannot lose sight of the fact that some judicial processes are abused for self-interest by foreign patentees, as in this case. We have been discussing ways and means how that could be stopped. Although the Executive should not be armed with greater powers, some means must be found to expedite matters.

Shri Dalpat Singh: In your memorandum you have cited a case how some parties have taken undue advantage of the Act. Do you think that the present proposed Bill is again like the existing Act or do you suggest some further changes?

Shri A. C. Mitra: No, Sir. Particularly I tell you, Sir, that the present Bill certainly meets; or at least so it would meet, the situation as the one created by Parke Davis. I am not suggesting any new improvements.

Shri A. T. Sarma: Have you certain difficulties in the Bill? Do you agree with the other provisions of the Bill entirely?

Shri A. C. Mitra: Sir, I have not had time to read the other provisions of the Bill in great detail. I have come here to present that aspect of the Bill which relates to compulsory licence and relating to foods and essential drugs. On that aspect I have come to make my respectful submissions to the committee.

Shri A. T. Sarma: You must have gone through all the provisions of the Bill.

Shri A. C. Mitra: I have gone through, but not to that extent as to assist you in greater detail.

One thing I may tell you. My friend on my left asked about research. Sir, probably my friend also knows that the minimum amount of money required to set up a research centre of the type that my learned friend has in mind, would, I think, be—this is subject to correction—several crores of rupees.

Shri C. B. Singh: We will not talk about that now. We have talked about that till now. You are a lawyer, you can speak about law. You know nothing about research; so, do not talk about research.

श्री चौरङ्गिया : पुराने पेटेंट कानून की कौन सी धारारें ऐसी थीं कि जिनका लाभ लेकर के आपको 6 वर्ष तक क्लोरमफेनिकाल बनाने नहीं दिया ।

श्री ए० सी० मित्रा.: आप सेक्शन 23 सी सी सी। देखिए। यहां पर होता क्या है कि कम्पल्सरी लाइसेंस जब आप दरखास्त करेंगे कंट्रोलर साहब के पास तो कंट्रोलर साहब एक नोटिस देंगे पेटेंटी को तुम्हें क्या कहना है, कहो। तब उन को जो कहना है, वह कहेंगे। उसके लिये टाइम लेंगे। टाइम लेकर सच्ची दरखास्त करेंगे कि यह है वह है। यह डिस्कशन होते होते तब कहेंगे कि हमारे एक्सपर्ट आ रहे हैं। उसके लिये और टाइम चाहिये। इस तरह टाइम मांगते रहेंगे। अगर टाइम न दिया जाय तो मुश्किल यह हो जाती है कि हाई कोर्ट में केस जाता है तो कहते हैं कि नेचुरल जस्टिस नहीं हुई। इसलिये टाइम दिया जाता है। ग्राबिटर में क्या होता है, यहां पर इन दिस पर्टिकुलर केस, कंट्रोलर साहब ने कहा कि अच्छा देखें, हम विचार करेंगे कम्पल्सरी

लाइसेंस दिया जाय या न दिया जाय, इन दि मीन टाइम तुम्हारे टम्स क्या हैं। अगर हम डिसाइड करें कि दिया जाय तो तुम क्या टम्स रखोगे। लेट मी हैव योर टम्स। यह इन्होंने नहीं दिया। इन्होंने कहा कि यह आप क्या कह रहे हैं। आगे आप ही डिसाइड करिये कि लाइसेंस दिया जायगा या नहीं, तब हम टम्स दें। यही बात टाल मटोल करते करते आज तक टम्स सेटिल नहीं हुए। आखिर में क्या हुआ, इन्होंने कहा कि अपने टम्स हम को इस तारीख तक दे दो। उस के बाद फिर ये हाईकोर्ट में चले गये, कहा कि यह ज्युडीशियल फंक्शन है, चूंकि हमारे पास पावर्स नहीं है, इस लिये हम को कोर्ट में जाना पड़ा, अब एफिडेविट हो रही है, रिप्लाय हो रही है।

Shri V. M. Chordia: What are your suggestions so that in future this type of delay may not occur?

श्री ए० सी० मित्रा: विल में यह कहा गया है, जो चेयरमैन साहब ने दिखाया है। कंट्रोलर सीधे लाइसेंस दे सकता है, वे लाइसेंस तुरन्त दे सकते हैं, लेकिन ऐसा नहीं हुआ।

In the meantime, pending discussion, if the licence is granted, work can go on.

श्री चौरड़िया : फिर भी वह स्टे तो ला ही सकते हैं।

Shri B. K. Das: It appears from the memorandum that you are in favour of licence of rights. There is a provision for a maximum royalty of 4 per cent. Will that be enough? There is evidence that it should be left free to be decided upon by the parties concerned. What would be the better provision?

Shri A. C. Mitra: According to my instructions, 4 per cent is a fair return on the patent price.

Shri B. K. Das: Parke Davis had six patents for one product. These are all process patents I believe. Three of them expired and were granted to another party. I want to know whether a patent for more than one process should be granted to a single party, and if he does not exploit it within a reasonable period whether it should not lapse.

Shri A. C. Mitra: That would be a correct approach. He should be given the option of either utilising it himself within a reasonable time, or the new process should be allowed to be exploited by others, unless it is a patent which is inextricably connected with the main one.

Shri K. V. Venkatachalam: Can you give us an idea of the other activities of your firm, what other items are you producing?

Shri N. L. I. Mathias: Neo-Pharma has been by and large specialising in anti-tubercular preparations. My company is a pioneer in the introduction and in the basic manufacture of PAS and its salts in India. We, in collaboration with another company in Hyderabad and a foreign collaborator, were responsible for pioneering this effort of manufacturing in the country PAS and its salts for the first time.

Shri K. V. Venkatachalam: Is there any exploitation of a patent involved in that?

Shri N. L. I. Mathias: There have been some patents on that also. Therefore, without that we would not have been able to manufacture this in the country.

We have obtained the technical process for the production of PAS and its salts, and we are paying a reasonable royalty of 2½ per cent. Our relationship with that company is reasonably satisfactory.

Shri K. V. Venkatachalam: If you are successful in getting this licence from Parke Davis for chloramphenicol, what percentage of finished material would you start with?

Shri N. L. I. Mathias: Probably from the stage 25 to 33 1/3 per cent from the top and then go down to the very basic stage from which all others in the world are manufacturing.

Shri K. V. Venkatachalam: Barring Parke Davis, are there any other Indian manufacturers manufacturing chloramphenicol?

Shri N. L. I. Mathias: There are one or two other manufacturers. One of them is working in collaboration with Italian manufacturers.

Shri K. V. Venkatachalam: Don't they have the same difficulty?

Shri N. L. I. Mathias: The position is very clear in as much as Parke Davis which has a wide-spread network is the originator of this process. There are no two opinions about it. But Parke Davis has had a lease of life of probably 18 years now, because it was in 1948-49 that this product was discovered and had begun to be commercially made available in a good part of the world. Since then Parke Davis has been licensing their own agents and their own nominees in different parts of the world including Italy. After Italy lifted the patents, many Italian companies have been still respecting some of these for the benefit of their overseas consumers. There is one Italian company which has come to an arrangement with Parke Davis and a sub-licence has been given by them to another Indian company called Mac-laboratories. It is a very small, insignificant quantity of about 800 kg. per annum.

Shri K. V. Venkatachalam: Are this long delay and dilatory tactics a solitary case or have there been some other cases?

Shri N. L. I. Mathias: There are also other cases. I would not be able to give you details.

Shri K. V. Venkatachalam: Can Mr. Mitra say, with his experience on the legal side. The only point in

my asking this question is because, whether we should make a law based on just one or two cases.

Shri A. C. Mitra: That is not the approach, if I may say so, with respect. The question is, with the law as it stands, is it capable of being exploited by any unscrupulous patentee.

Shri K. V. Venkatachalam: Are there other similar cases?

Shri A. C. Mitra: The fact that it has been exploited is apparent in this case. I do not know. There may be other cases.

Shri K. V. Venkatachalam: One more question. You said your turnover was of the order of Rs. 1 1/2 crores. I should have thought that as a forward looking company, you would put by some part at least for research. You could have started with Rs. 10 to 16 lakhs for research, I think.

Shri N. L. I. Mathias: Unfortunately, with the heavy taxation as well as the expenditure that we have got to incur, net profits are very small. Primarily because we are, in the majority of our products, representing foreign manufacturers and as such we operate on very modest margins. You can produce a turnover but ultimately a modest margin leaves us very little, and if we are to experiment and go into original research, as my friend has suggested, probably we may be going into an empty adventure and ending up in a big loss.

Shri K. V. Venkatachalam: On the one hand you say that you do not want any foreign assistance, and at the same time you say you cannot put up any money.

Shri N. L. I. Mathias: Our country should have basic industries and it is this basic industry that we have been prevented from setting up. It has taken more than six years before we have struggled into getting a compulsory licence. You can control the

industry, despite foreign collaborators having been conceded equity shares in the company. Ultimately, we are supposed to have this industry in Indian hands with Indian labour, capital and run completely with Indian technical know-how.

Shri K. V. Venkatachalam: You have put by money?

Shri N. L. I. Mathias: We have already put in quite some money. We have sent two or three chemists abroad. We have spent quite something to train these people in Italy, and these people also have come into contact with our German, Swiss and French collaborators. These chemists are highly qualified and would have sufficient know-how. They have acquired the technical know-how of chloramphenicol manufacture also.

Mr. Chairman: Thank you very much.

Shri N. L. I. Mathias: There is one small submission which I would like to make before we finish. Reference was made to the question of prices with respect to Parke Davis and other companies. As far as the bulk supplies of chloramphenicol are concerned, the price is Rs. 600 per kilogram, as against the open world market price of approximately Rs. 90 per kilogram. It is the same chemical substance which is produced all over the world, and the process is as old as 18 years. It is their own indigenous production by the same process, but the production is not made available to any actual user. No actual user in the country can purchase this active substance from Parke Davis. We sought to purchase some quantity from them, but they said they did not have anything to spare as their entire production is utilised in the formulation of their own speciality lines. They have, therefore, nothing that they can sell to anybody.

Mr. Chairman: You can buy from other manufacturers.

Shri N. L. I. Mathias: But the price is not very much different. As I said Rs. 90 per kg is the world market price which does not exist in our country, but exists all over the world for the very Parke Davis product. It is the very same substance and not different whatsoever, except that Parke Davis says chloromysktin in manufactured by Parke Davis. It is only a trade name. It is nothing else than a commercial trade name for a chemical substance which people in other parts of the world also manufacture. It is as simple as a text-book reaction and is very simple. But the same process could not be made available to another independent pharmaceutical concern which has the same skill, competence and ability. Why? The very substance which is made available at Rs. 90 per kg in the world market has to be bought by us at Rs. 600 per kg. That is how monopoly conditions are being operated in this country.

Shri Braj Behari Mehrotra: How long are they exploiting this?

Shri N. L. I. Mathias: They have introduced this in different parts of the world since 1948. India also got this at about the same time.

Shri V. B. Gandhi: As compared to Rs. 90, what would be your cost if you can produce it?

Shri N. L. I. Mathias: As far as retail price is concerned, our price could be still cheaper than Parke Davis's. As far as the basic chemical is concerned, we have been prevented from manufacturing it. Our price—if we go into manufacture—it would be rather difficult to mention it.

Shri Ram Sewak Yadav: Approximately?

Shri N. L. I. Mathias: I can assure the Committee that our price will be substantially cheaper than the price of Parke Davis.

Shri R. P. Sinha: Is the patent still alive, from 1948?

Shri N. L. I. Mathias: The patents were 16 years old. Subsequently some of these have been extended. There are some patents which are called additive patents, that is, patents which have been brought into existence with minor variations and changes. I understand the 1948-49 patents have expired.

Shri B. N. Atrishi: 5 patents were applied for compulsory licensing. 3 have already lapsed and at present 2 patents are there for which compulsory licence has already been granted. Parke-Davis have brought an appeal in the Calcutta High Court. But the life-time left for these patents is hardly 2 years. Not a single patent of Parke-Davis has been extended.

Shri R. P. Sinha: May I know whether with the help of the 3 expired patents, it will be possible for you to manufacture this product?

Shri N. L. I. Mathias: The old patents have been so modified or varied in the form of 'additive' patents that in the ultimate stage, before the final product is got, we have to pass through some reactionary stage or other that is still controlled by the 'additive' patents. That is where they squeeze us out.

Shri B. N. Atrishi: They are independent; I do not think they are patents of addition.

Shri P. K. Kumaran: What prevents them from adding some new substance giving it a different trade name and manufacturing it?

Mr. Chairman: The patent office says they are new patents. There is nothing to prevent you from using the lapsed patents.

Shri N. L. I. Mathias: Our information is they are 'additive' patents. We may be mistaken in the nomenclature as to whether they are additive or

new patents, but these patents are so formed that they embrace some reactions of the old patent and the ultimate product cannot be arrived at unless you infringe in some stage or other one of those reactions.

Shri R. P. Sinha: In 1948 chlorophenecol was being manufactured with the help of the three patents which have now expired. Why can't you manufacture it with the process contained in those expired patents by which they were manufacturing it in 1948?

Shri N. L. I. Mathias: That is what I explained now. The new patents embrace at some stage some reaction covered by the old patent. The new patents are not new from A to Z.

Shri K. V. Venkatachalam: The expired patents were being utilised previously for the production of chlorophenecol. Why can't you use those expired patents? Nobody can challenge you for that.

Shri N. L. I. Mathias: That is what I just explained. At some stage the new patents embrace some reaction covered by the old patent.

Shri R. P. Sinha: We are not satisfied with this argument. The matter is not clear to us.

Shri P. K. Kumaran: I will read out something from the *Sunday Times* dated 4th April, 1965:

"It is not even necessary to change the molecular structure of a product to produce and market a new product. An alternative and highly profitable field for research in the industry lies in the additives. Dr. Weinstein told the Kefauver Committee how Pfizer anxious to market in the US a tetracycline different from other companies (and its own) thought of adding glucosamine. Glucosamine is a naturally occurring substance which occurs in the blood and this has been added to the tetracycline with the hope

that this would increase the absorption of the tetracycline. This is the only thing hoped for. There is nothing in the combination to change the effect of the tetracycline itself."

If Pfizer could do it, why not we?

Mr. Chairman: We have not got the know-how as Pfizers.

Shri R. P. Sinha: I feel this company has not got even a small research unit to modify it slightly as suggested in this article or even to use the old patents. Therein comes the importance of research. Unless the Bill so provides that it gives incentives for research work or inflow of foreign technical know-how, the progress of pharmaceutical industry cannot take place.

Shri N. L. I. Mathias: If one actually knows the implication and the significance of what 'research' in the pharmaceutical field is, one would probably shudder before going into any original research. Hon. Members would appreciate that it is not easy to go into the research of a product unless and until we have at least the elementary experience of producing it first in the country.

Dr. C. B. Singh: For the information of the witness I may mention that in Japan four leading pharmaceutical companies have spent, mainly on research and development, during the year 1963, 20 lakhs, 22 lakhs, 28 lakhs and 10 lakhs dollars. In India hardly anything is being spent on research.

Shri R. P. Sinha: No research work worth the name is being done in India. Without research work, it is common knowledge, there can be no development in the field of pharmaceutical industry. If the Indian people are not in a position, because of lack of experience or lack of funds or something like that, we have to depend, as Japan and West Germany have done, on foreign technical

know-how and research. The anxiety of this Committee is to harmonise between these two points of view. How can we be guided by one solitary instance where injustice might have been done. We will try to see, as far as possible, that such injustice is not done. But we cannot ignore this fact that for a number of years to come, when even advanced countries like West Germany and Japan today are depending upon the research work done in foreign countries, we have to depend upon the research work done in foreign countries and we have to see that the benefits of such research work flows into this country.

Shri N. L. I. Mathias: With all respect to hon. Members of this Committee, I would like to submit that West Germany and Japan, since World War II, has not been responsible for any original research work in the pharmaceutical field.

Mr. Chairman: Thank you very much, gentlemen, for coming and assisting the Committee in its work.

(The witnesses then withdrew).

II. Haffkine Institute Parel, Bombay

Spokesmen:

1. Dr. H. I. Jhala, Director.

2. Dr. C. V. Deliwala, Assistant Director:

(The witnesses were called in and they took their seats)

Mr. Chairman: I have to inform you that the evidence that you give is public and is printed and distributed among members and is also laid on the Table of the House. Even if you want any portion of it to be treated as confidential, still it will be distributed to our members.

We have received your memorandum. It has been circulated to all the members of the Committee. We have visited your Institute also. If you want to mention any new point or stress the points which you have al-

ready made, you may please do so now. Afterwards, our members will ask questions.

Dr. H. I. Jhala: Even though both of us are appearing from the Institute, we shall try not to overlap each other. We shall try to make out separate points so that the time of the Committee is not wasted. I have about ten points to make which I would first like to narrate. Later on, if you have any questions to ask, I shall be grateful to elucidate the points further.

The reason why I am appearing before this body is because the Haffkine Institute is one of the oldest medical research organisations in the country and produces, drugs, especially in the field of biologicals like vaccines and serum, and also for the last 20 or 25 years we are interested in preparation of drugs which have chemo-therapeutical remedies for control of diseases.

We have got a section of organic chemistry, which we call the Department of Chemotherapy, where we synthesize the drugs. We also have a department where we work on indigenous drugs. The drugs that we work upon are worked out for formulations as well as for trying to find out the processes for their manufacture including those for known compounds. If a compound is known already in the field, we try to make out a process of our own to produce it at the Institute. We work out on the laboratory scale as well as at the pilot plant scale and try to get a patent where it is possible to get one.

Besides this, under the present licensing procedures all applications for biologicals being licensed are referred to the Haffkine Institute. Therefore I get a number of agreements of collaboration between various foreign and Indian firms referred to me for the sake of comments.

Shri R. P. Sinha: We would like to know whether the Institute is some

expert body or a research institute or some profit-making body.

Dr. H. I. Jhala: The Haffkine Institute is an organisation which is departmentally run by the Public Health Department of the Government of Maharashtra and it is not a profit-making institution.

I only wish to confine my remarks to pharmaceuticals and foods. I am not dealing with any questions of patents which are in the other fields. My field of specialisation is only that. There are many countries in the world, at least ten I know of, which do not allow any patent in pharmaceuticals and foods. I am referring to product patents.

Mr. Chairman: Which are those countries?

Dr. H. I. Jhala: They are Argentine, Austria, Brazil, West Germany, Holland, Iran, Italy, Japan, Mexico and Venezuela. There are some countries which have process patents.

Shri R. P. Sinha: Do these countries allow process patents in drugs and foods?

Dr. H. I. Jhala: As far as my information goes, they do not allow product patent. I have no information about process patent. Some countries allow process patent and there are some which allow both.

When a country grants product and process patent, there are some anomalies that appear. One is that the drugs sold become costlier. They cost much higher in those countries where product and process patents are given. Secondly, it leads to the elimination of competition resulting in monopoly or syndicate resulting in bad practices for exploitation of the market. Thirdly, there is abuse of conditions granted to them. There may be saving clauses, like compulsory licence, but even then they so abuse it that you cannot exercise those rights. The privilege is being misused more than

used in favour of the country granting the licence. Lastly, I find that it only leads to increased sales and increased expenditure on sales through advertisements, commission and many other practices. It does not in any way improve the science in the country because, in any case, the inventor in most of the cases is an individual by himself and he himself does not manufacture; it is the company that exploits the fruits thereof and science by itself is not in any way benefited.

Mr. Chairman: This is as regards product patents.

Dr. H. I. Jhala: Both product and process patents.

So, my submission would be that there should be no patent for product *per se*. If anybody can manufacture it by any other means, he should be allowed to do so. Not only that, but he should be allowed to import it also from other countries. When we give the product *per se* patent, we are not even allowing the import of that product for sale in this country. My submission is that product *per se* patent should not exist.

I am not in favour of having any patents at all in relation to pharmaceuticals and, maybe, foods; but if a process patent is to be granted for other reasons, I feel that there should be a clause for compulsory licence at a reasonable fee. In addition to that, one more clause should be introduced, namely, that if a patent is not used for sufficiently good time, people in the country should be free to exploit it. There should be a clause for revoking that patent.

Many times the patents may be filed not as patents for drugs but as patents for other things. This may be purposely done so that it may not be marked as a drug. But if we find that it is usable or used as a drug in this country, we should get all the rights of revoking that patent if it is not used and also of compulsory licensing. We should also try to introduce a patent of right.

Mr. Chairman: What do you think should be the time limit that should be prescribed?

Dr. H. I. Jhala: No drug in any market has remained for more than five years. In five years all drugs disappear from the market. Of course, I am in favour of going up to seven years with no extension, but as far as drugs go in the market no patented drug remains in the market for more than five years.

Mr. Chairman: Suppose, a drug is not manufactured in the country after it is patented. What is the timelimit that should be prescribed for the grant of a compulsory licence?

Dr. H. I. Jhala: I should think in two years you can manufacture anything; at the most you may give three years. Beyond three years I do not think we should wait, because technology in this country is so well developed that there should not be a lag between a discovery and its application for alleviating human suffering of more than three years.

Then, as regards royalty, I find that royalty is being claimed in various ways, not only straight as a royalty but it is given in various ways in the collaborative agreements. However, if a straight royalty is to be paid, I am of opinion that 2 per cent royalty would be fair enough because, as far as the expenditure goes, even in advanced countries the expenditure on research in pharmaceutical concerns does not exceed 6 per cent of their total expenditure. They have got a very high expenditure on sales and even with that inflated expenditure with lot of sales expenditure, the total expenditure which any company has to do never goes to more than 6 per cent. This they can easily recover. In India it is much less; I do not think it exceeds even 2 per cent.

Mr. Chairman: 2 per cent of what?

Dr. H. I. Jhala: If a company is spending a total of Rs. 100, it spends hardly Rs. 2.

Mr. Chairman: Expenditure for the whole company or for the particular product?

Dr. H. I. Jhala: I am talking about the total expenditure of the company producing the product.

Shri R. P. Sinha: What do you mean by "expenditure"?

Dr. H. I. Jhala: A company incurs expenditure. It has raw materials; it has direct overheads and it has indirect overheads. In the balance-sheet, there is the mention of expenditure of the company and out of that expenditure, 6 per cent only is the expenditure on research in most developed countries.

There is one more point that I want to make. There should be no ban on Government's buying and selling a product if it is necessary for the country's needs. I think, there should be no ban at all on that.

Now, I come to certain other points. Today, there are some oral anti-diabetics drugs which are under the patent and one of the products is Tolbutamide and it comes under the name of Rastinon which is sold by M/s Hoeschst Pharmaceuticals. The same product is produced by another process for which the Haffkine Institute has its own patent and the price of that drug, as sold in the market by us, is 5.5 paise. The same drug is sold for 21 paise per tablet by M/s Hoeschst Pharmaceuticals. We are able to cover our cost, the research cost, etc., and we are able to sell the drug at the price of 5.5 paise per tablet and that Company charges 21 paise for the same tablet, for the same chemical, in the same city of Bombay. I just want to point out how the granting of a patent increases the cost. The sale of this oral anti-diabetics product in this country is in the vicinity of Rs. 2 crores and the price difference is four times in the same area. This is the point I am making about the high cost of the same product in the same area.

The second way in which the cost is made up is because they try to

bring in a compound which is a rather rare compound. For instance, there is a compound Paratoline Sulphamide which is made in India. But if you take Paratoline Sulphamide Carbonate that is not made in this country. Now, the firm will buy the latter at any price they like and thereby increase the cost. If you go into the question of cost accounting, you will be able to come to the conclusion that high price is charged. These are the trade practices followed so that the available cheap raw materials are not used but some specific raw materials are used which will increase the cost.

Whenever we have tried to exploit the question of compulsory licence, we have not been able to get it. During the plague epidemic we were not able to get Sulphathiazole compulsory licence from May and Baker. The then State of Bombay tried to negotiate for it but could not get it. The same thing happened in the days of malaria epidemic. We were not able to get a compulsory licence for Proguanil and our application for a compulsory licence went on for 3 to 5 years. I can say that in most of the cases, these drugs went out of market and we lost our interest. We were told to manufacture it and we proved to them that we can manufacture that drug. They said that we would have to take a compulsory licence. Our product was going to be three times cheaper. But we were not granted a compulsory licence. The case went on for 3 to 5 years and by that time those drugs went out of market.

It is argued that in India, there is a tremendous expansion of the pharmaceuticals industry in the last few years. This is true. But this is not the basic manufacture of drugs. What is being done is that there is an imported component and we try to formulate it. This is not the real development of the country. In spite of granting patents for all these years, I do not think the pharmaceuticals industry has progressed at the same level as it has developed in other

countries. Even in a country like Italy which does not give the patent, the industry has developed very well. They sell antibiotics like Chloromycetine and there was the agreement between the Leptit Laboratory and Parke-Davis. The Leptit Laboratory was acknowledged as the source for the patent which was granted to the Parke-Davis in America. In other words, there are countries where the patent is not granted and yet the development is very well and there are countries like India where the patents have been granted for so many years and yet the development is not that much. Superficially, you may be told that there is tremendous expansion but there is no basic expansion. We have still to depend on the import of raw materials.

India is entering into collaboration with foreign countries for the production of certain drugs and under some of the agreements which have been referred to me I find the foreign firms are taking a lot of money from us under different pretexts. The field in which I work is Biology. There are hardly any patents in Biology. The products are known and made by an open method. There is no secret about it. Yet the agreements which are entered into by foreign countries with our Indian collaborators stipulate that they shall give the building designs when, as far as I know, there is no necessity of building designs and that they shall give the designs of equipment when, as far as I know, there is no necessity of equipment designs because there are standard designs of equipment. They want money for all that. They also stipulate that they shall give the know-how. In the field of Biology, there is no question of know-how. They have no secrets with them. They also say that they shall have the cost accounting system which will be given by the foreign firm, that they shall have to act according to the cost accounting system which means that the product will cost more and the royalty rate will go higher. For all these things, they want to take lumpsum payments.

I do not think the country is so backward as not to be able to do these things themselves with a sufficient experience.

I submit the Patents Act so far has only given benefits to the foreigners and the legislation as it stands today is not in the best interest of citizens of India. It is high time that we take a fresh view on this as we are trying to take. Even the Committee of the U.S. Senate which was appointed by the U.S. Senate to go into the question of the drug industry and the patent business came to the conclusion that the patents in the United States should be abrogated. The Committee's report was not accepted though it was a Senate Committee. What I submit is that, even in countries like the U.S.A., there is fresh thinking that is developing and there is a fresh mind that is being applied to the present patent law.

Finally I would say that, out of all vested interests, the vested interest in ill health would be the worst and it should not deprive the Indian citizens of the drugs to cure diseases or food for babies; it should also not prevent the Government from rescuing people from epidemics or a diabetic patient from leading a normal life.

That is all. I have made my submission.

Dr. C. V. Deliwala: I have put down some of the points here. It will be better if I read them clearly.

In our attempts to develop technology and create know-how for drugs, we have had a good experience about the working of the Patent Act in India over the past 20 years. Our experience about the working of the patent system and our suggestions in the matter of modification of the Patent Act have been put before the Select Committee in the form of a Memorandum earlier.

Since the last 25 years, the Institute has been engaged in the study of synthetic drugs and has taken out a large number of patents. It has the

distinction of being a pioneer in creating know-how, of modern synthetic drugs without foreign collaboration.

Mr. Chairman: You need not read the Memorandum. You may highlight only the salient points.

Dr. C. V. Deliwala: It had to face threats, litigations and other difficulties from foreign firms who alleged in some cases that they alone had patent rights in these drugs.

We are sure, therefore, that our experience in the matter of operation of Patent Act in India would be of great interest to the hon. Members who are earnestly engaged in working out a Bill that will encourage the development of research, inventions and technology and guide the nation towards self-sufficiency and self-reliance. Some of the members of the Select Committee very kindly visited our Institute and saw the work we are carrying out and also gave a patient hearing to our plea for urgent modifications in the Patent Act. We hope that they will appreciate the need for abrogation of the Patent Act or modifying it drastically so that it becomes an effective instrument in the rapid technological development and progress of the country and the well-being of its citizens.

We have suggested total abrogation of patent laws in our Memorandum. If this could not be done due to some reasons, then at least no patents should be granted to inventions covering the manufacture of food, drugs, medicines and chemical intermediates thereof. These suggestions of ours are based on our experiences and observations on how the Patent Act has been utilised by foreign patentees, to prevent the development of Indian know-how, starting of new technology and building up of self-sufficiency.

We sincerely believe that, in the matter of saving life by rescuing from the jaws of hunger, disease, pestilence and death, it is the humanitarian task that should rule supreme. There should be no scope for making undue profit

in these matters concerning life and death. In developing countries, including ours, where the majority of the population is not even having sufficient means to purchase their bare minimum requirements of food to ward off hunger, to sell to such population the drugs and medicines or food at prices which are exorbitant and what is worse, to sell them at much higher prices compared to the ruling prices for the same drugs in developed and well to do countries, is a social crime that should not be allowed or pardoned.

A study of the patent system in India upto now shows that more than 90 per cent of patents taken out in this country are by foreign firms for the inventions carried out abroad. This is very important. These inventions have not been carried out in India and so the technology has not developed in our country. These inventions have been carried out in their own countries and have been patented here. What percentage of total patents taken out in our country are by Indians? Out of these, how many were subsequently patented in other countries by using the convention of reciprocity clauses of priority among the patent convention countries? If I make a good invention and if I want to get it patented all over the world, to get the specifications translated in all languages and to arrange to ensure that my patent will be not used by others, it would be difficult; it will cost a fabulous amount for the Indian manufacturers; when they cannot afford to start an industry, what to speak of applying for patents in other countries! So it has only a one-sided affair and we have not been able to take advantage of that. The majority of patentees from foreign countries who have taken patents in our country have done so only to prevent any one in this country from manufacturing the patented inventions and to prevent their import from cheaper sources, so that the highest possible prices could be charged by utilizing the monopoly resulting from

the Patent. Whenever they have been persuaded to take up the production in this country, often they have managed to avoid or postpone the production from basic starting materials and as far as possible, only imported the penultimate product, which by a single or few steps could be converted into the final product calling this "Made in India". They have, of course, given me this argument—of course, they were right: "whatever we have patented here, we are producing here; we prepare a drug; only a couple of stages are involved". So they are right when they say that they are manufacturing from the last stage. We have no grudge against it. But, while doing that, it does not develop the technology of our country. That is what I want to emphasize. It is argued that, in the present Act, there is a provision for compulsory licensing of inventions relating to drugs and medicines, and the Indian nationals should take advantage of it. However, our experience in the operation of this provision of compulsory licensing is that this provision is ineffective. The following instances of our experience will show the inadequacy of the Patent Act and why we should abrogate it or modify it drastically. I am going to give you two cases where we require the drug very badly—one for saving the life of the victims of plague and the other.....

Mr. Chairman: This has already been mentioned.

Dr. C. V. Delliwala: I shall read out only a little.

Mr. Chairman: It is not necessary.

Dr. C. V. Delliwala: I wanted to show that one of the compounds was found by us—we found it; this is the more important part of it—to be highly effective against experimental plague infection in laboratory animals. Then we took out actual chemical trials and we could see that 80 per cent of the plague victims could be saved by treatment with this drug. This drug was required to be manufactured in this country or to be imported immediately. All the know-

how for the preparation of this drug was worked out in the Institute without any foreign collaboration. This drug was not available in the country and attempts were made to get a compulsory licence for the use of Government from the foreign patentee, according to the provisions of the Patent Act existing then. The patentees, however, frustrated the attempts at manufacture of this drug in the country and making it available cheaply on the grounds that Haffkine Institute was not capable of manufacturing the drug due to lack of adequate facilities. This shows how the efforts to save lives of plague victims by taking up the manufacture at a critical time were brought to naught. The drug was later made available in the country by imports from UK in limited quantities at a price of Rs. 250 per lb. by the foreign patentee, whereas our cost of manufacture on a very modest scale, if it was manufactured here, would come to only Rs. 20 per lb. The difference is more than 12 times. The same drug could have been imported from the United States at that time at a landed cost of Rs. 39 per lb. because in U.S.A., there were a number of patentees and the drug was being manufactured and sold, but we could not import it because the patentee in India had the right to manufacture and sell and will not allow anybody to import the drug even if it was available at that cost. This shows how the efforts to save lives of plague victims could not be at that time successfully carried out. The drug was later imported from U.K. as I told you already. Unfortunately this drug could not be imported from U.S.A. where it was very much cheaper because the patentees under the Indian Act had the exclusive monopoly. In U.K. later on the Patentee was challenged in the court and the patent was revoked. As a result the price of this drug even in U.K. came down to a small fraction of the original price.

What I wanted to mention here is that under this patent which was actually invalid—it was not a valid

patent in this country—it was not possible for any one of us to fight or obtain licence and as a result we had to pay a fantastic price for the drug for a number of years even on a patent which was not valid. It is a very important fact and I would like the hon'ble Members to note this.

Another very interesting drug which we were interested to produce was proguanil hydrochloride—an antimalarial drug and the Indian Government was in need of large quantities of this drug. A number of processes of this drug were patented in this country by a U.K. firm. Even at the concessional price of Rs. 95 per lb. offered by the U.K. firm, it was beyond the means of the Government to purchase enough quantities. So the Institute practically worked out the know-how, the process, technology etc., to produce it indigenously and our cost was only Rs. 30 per lb. An application for the grant of compulsory licence was made to the Controller of Patents as per amendment introduced in the Patents Act after Independence.

Mr. Chairman: It is not necessary to repeat what you have already stated in your memorandum.

Dr. C. V. Deliwala: There are certain minor points which I wanted to bring out fully to your notice.

Tolbutamide is another case. Here, in spite of our having a valid patent for 8 years we were not able to operate on that. The argument is that the process patented by us is not new but is already covered by one of their patents. The case has been pending in the court. They say we are infringing upon their patent. If it is so, they have no reason to go to Japan one month after we have filed our patent in India and take an additional patent covering its manufacture by a process similar to ours. Another interesting fact about this is that this patent has been revoked in Canada. On this patent we have been paying Rs. 2 crores, and they

are selling it to-day only in the loose form.

Another interesting case is Chlorpropamide. One gram of the drug contains 4 tablets and one kilo makes 4,000 tablets. Even there also the price is exorbitant—Rs. 35 for 100 tablets. In my memorandum I have dealt with this case very thoroughly and I will not stress that point again.

Under the circumstances, the provisions of the present Patent Act and the legal procedures connected therewith give a monopoly to the foreign patentees. These bitter experiences compel us to submit the following suggestion in the interests of the industrial and technical development of the country and the well-being of the citizen.

Our experience and that of all other Indian manufacturers who have been struggling to create know-how for the indigenous manufacture of important and essential life-saving drugs and medicines would convince anyone prepared to take an impartial and unprejudiced view that the continuance of the Patent law is not in the interests of the country. Under the circumstances, we suggest that the Patent law should be abrogated.

I would request the hon'ble Members to go through a research paper published by the Reserve Bank of India in their bulletin of March 1966—the title of the paper is: 'Patent and the International Transmission of Technology to Developing Countries: with special reference to the Pharmaceutical Industry'. This paper gives valuable data and reasons supporting our suggestion for abrogation of patents.

The country has derived no benefit from the Patents Act for the past 18 years since Independence and it would have been possible to do something if we had no patent Act. We would have already got enough technology.

Pharmaceutical firms invariably exploit the patent monopoly and charge exorbitant prices for their patented products. To justify this they have been giving a number of arguments. I have been discussing with these people who have been opposing this Patent Bill. I will try to deal with their arguments point by point.

In justification of this fantastic level of exploitation these monopoly firms often argue that they have to keep these high prices to recover the high expenditure that they have been incurring on the research and development of new drugs. This argument does not hold any water as shown in the Kefauver Committee's report which found that the actual expenditure on research was only 6 per cent of the sales whereas they have been spending as much as 25 per cent on propaganda and high-pressure salesmanship. It should also be realised that on this 6 per cent they also get some rebate by way of taxes. It is shown as expenditure.

They also say that the high prices are not due to their monopoly rights but due to other factors in our country such as limited production, high overheads, heavy taxation, high cost of raw materials, etc. This is also, in my opinion, false. How will these firms explain the fact that when they were, wholly importing the patented products, which were made in their own countries where presumably the factors like limited production, high taxation, high raw material cost, high labour charges etc. do not exist, still they charged several times the price at which the same drugs could be imported from other countries where there was no patent monopoly?

Another interesting fact is that when they claim to manufacture the patented product in this country, actually they import the penultimate product or the last stage intermediate and only by one or two steps get the finished product. So the cost of processing—they say that it is actually due

to the high cost of raw materials—is negligible in the whole production cost. How can they then argue that because of high cost of raw material, etc. they are forced to charge such exorbitant prices?

They also state that there has been a tremendous progress in the pharmaceutical production which was only Rs. 11 crores in 1948 and which is now Rs. 175 crores. On paper these figures seem impressive. However, when the local production was Rs. 11 crores what was the cost of finished pharmaceutical goods imported? Rs. 110 crores worth of finished pharmaceuticals we were importing. All that has happened is that instead of importing the pharmaceuticals in the form of finished products, we now import bulk pharmaceuticals or their penultimate stages and process or formulate them into finished clinical products.

If, for any reason whatsoever, it is decided not to abrogate the Patent Law, then we suggest that at least no patents should be granted for products or processes covering the manufacture of food, drugs, medicine and chemical intermediates used in the manufacture of drugs and medicines.

It is also argued by them, particularly by the foreign patentees—they say that they have been trying to impress on the minds of the hon'ble Members—that the product *per se* should be introduced because it is going to be useful for the country. I will just try to deal with this point in a little more detail.

We have to argue for, supposing it is going to be introduced, what will be the effects. They argue that product *per se* must be allowed because the patents for processes only do not give the patentees adequate protection and returns.

The monopoly drug manufacturers suggest that the research and development energy should not be wasted by directing it towards better and chea-

per processes of manufacturing known effective drugs but should only be directed towards finding out newer drugs. Now, what they do is they say "we have got a new sulphur drug, one tablet of which is enough to cure you instead of six tablets of the old drug; instead of taking 60 milligrams, 6 milligrams of this new drug will solve your problem." And there are a number of new tranquilisers now. They say that research should be utilised for finding newer drugs and not for developing cheaper process for manufacturing known drugs. We beg to differ and wish to submit that having found a new drug in itself is of no utility unless the technology of its economic manufacture resulting in its being made available in adequate quantities and at reasonable prices within the reach of the majority of the population.

I have also to stress that in our country, thousands of people die or suffer from maladies not because there is no effective drug for that malady, but they die or remain helpless victims of the disease simply because they cannot afford to purchase the drugs which are known to be effective but which are so costly that they are beyond the purchasing power of these poor victims or even beyond the limited budgetary provisions of the Government hospitals. That is a very important fact.

Any number of examples could be given to show that it is the attempts to find cheaper and better methods of producing known and effective drugs that have contributed to the development of newer technologies and inventions that have not only made the drugs within the purchasing power of the population but has given tremendous impetus to inventiveness and these activities need all encouragement. The penicillin when it was found was very costly and after development and research its cost has come down. If product *per se* had been given to this, it would not be available so cheap. Take chloromycetin. In Italy, its price was

brought down from Rs. 1,100 to Rs. 200 step by step and each step was worked out. So we most emphatically say that no patent protection should be granted for product *per se*. Even the Kefauver Committee has shown that wherever there is product *per se*, the prices there are invariably higher than those in countries where product *per se* is not allowed.

Another point is that the patent granted should give protection in so far as the invention is practised in this country and no rights should accrue to the patentee with regard to importation of patented invention as his exclusive right. This is what I have been trying to emphasise, that whenever a patent is taken out, they make import in such large quantities that it can last even for five years. That is possible. I think in Japan, whenever a patent is granted, they allow it only to be practised in that country; this may be right or wrong; I am not sure about it.

The next point is that some people have suggested that the life of the patent should be much longer because the patent in some cases is not sufficiently remunerative. I would like to deal with this point in some detail, with your permission.

Our suggestion is that "the life of the patent will not exceed seven years from the date of filing specification and no extension should be granted to this period of seven years." It has been represented that the period of protection should be extended to 14 years or in the alternative ten years from the date of sealing of the patent, with the possibility of extension of the term beyond ten years where the patent has not been sufficiently remunerative. It is difficult to find whether it has been "sufficiently remunerative" or not. Our view is that no extension should be given. Even in U.K. extension was given only during war-time when they could not utilise the patents during those years. In the olden days between the labo-

ratory finding and the product development a considerable time had to elapse. Now, however, the modern technology is so advanced that within a very short while, after the laboratory discovery and its clinical evaluation, the product is developed and marketed with "Patent Pending" legend to prevent trespassing by others in that product. Also the protection of patent starts from the date of filing. It is also well-known that in the United States the average life of a new drug is considered to be five years. Now a patent is granted to a person for disclosing his discovery. In return we give him a monopoly to use that patent exclusively for himself. Now in the United States and other countries the life of a new drug is considered to be five years. How is the public going to get benefit out of it? The privilege of having a monopoly for six or eight years is given with the clear indication that the public at large will be benefited as soon as the patent lapses, the drug is out of the market. So, I don't find any reason to support the suggestion for extension. The life of a patent should be seven years at the most, in view of the short life of new drugs.

Another point is that the product is put in the market under their own trade mark associated with it and even after the patent lapses, the trade mark always remains. So the monopoly still continues. I can give you a number of examples. The substance called Hetrozone is being produced by an Indian firm but this is sold by a foreign company under the name of their trade mark Hetrozone, though their patent has lapsed. The majority of the doctors know it only by its trade name and so they immediately prescribe it. So the monopoly continues. We were selling a product similar to Restinon at a much cheaper price. But all over Bombay, even in hospitals and in Government tenders, only Restinon is sought for. So the trade name is still existing and they still continue to get the benefit even though their patent has lapsed. There

is no reason why once the patent right has gone, our product cannot be sold. In Japan, the patentees are asked to bring down the price of their products as technology develops. Instead of allowing a man to ask for licence, they always try to bring down the price so that other people are not attracted to take to that manufacture. But in our country this has not happened. They don't bring down the prices. For the last eight years, the same drug is being sold at Rs. 21 for 100 tablets.

Another point is that some people were saying that the life of a patent should be counted from the date of sealing. Now, 'date of sealing' is a very vague term. If the patent is applied for, then even the date of acceptance has got its time variation. Sometimes it is immediately when nobody takes any objection. Sometimes it varies from 1 to 3 years, sometimes 7 years. It is just possible if it is given from the date of sealing, that the persons of the patentee may even try to ask somebody to oppose and delay the matter. Under no circumstances, the period should be counted from the date of sealing. It is always from the date of filing the application. Patent protection right starts right from the date of filing. They take advantage of it right from the beginning. Therefore, it should be given only for 7 years and it should be from the date of application.

Another thing that I want to say is about "Patent of Right." Anybody desirous of operating the same can simply inform the Controller of Patents of his intention to do so alongwith remittance of modest fee and then start manufacturing. There has already been discussion on this. The parties have been trying to oppose this Bill or Act. They have been arguing that there should be a Committee or a Tribunal to decide; the patentee should also have a voice in the matter. This is again going to delay matters. If some trouble arises, it becomes very difficult to come to any conclusion with the patentees. They will be raising number of points.

I would request you to look into this and at least have the provision in such a way that it is possible for any person to utilise the patent, develop the technology and have the licence very quickly. I had told this to some of the Members who visited my place—Haffkine Institute. Suppose I want to manufacture a particular produce because I find the prices have been very high and there is a possibility of technology developing here, I just work for 6 months and develop a product. Then what happens, I go to the Controller of Patents and if this Tribunal or Committee is going to be there and one or two years are going to pass, all my efforts of working on the technology of the product are brought to a naught. It is very difficult to first take the licence and then start the development of technology. If I take one or two years and I am not able to do this, people will say, I have taken out a licence but have not been utilising that licence. It is in everybody's interest that I must have the right to work on that first and then apply for the licence and I must be able to get it very quickly. That is all I have to say.

श्री ब्रज बिहारी मेहरोत्रा : हैफकिन इन्स्टीट्यूट रेस्टिनान के बजाये जो टेलब्रुटा-माइड को एन्टी-डायबिटिक की टेबलट बनाई है, क्या वह उतनी ही इफेक्टिव है, जितनी कि रेस्टिनान है !

डा० झाला : रेस्टिनान और टेलब्रुटा-माइड में कोई फर्क नहीं है। वह एक ही कम्पाउंड और एक ही कैमिकल है। रेस्टिनान एक ट्रेड मार्क नाम है, जो कि पेटेन्टिड है। हम ने कोई ट्रेड मार्क नाम नहीं लिया है। हम ने सिर्फ कैमिकल नाम रखा है।

श्री ब्रज बिहारी मेहरोत्रा : यह नाम आपने रखा है ?

डा० झाला : वह उस का कैमिकल नाम है वह नाम हम ने नहीं रखा है।

ब्रज बिहारी मेहरोत्रा : आप ने पांच ग्रैन की टेबलट बनाई है या छी भी बनाई है ?

डा० झाला : ये दोनों एक ही किस्म और एक ही वजन की टेबलट्स हैं। हम ने दोनों की कीमत कम्पेयर कर के बनाई है।

श्री रामसेवक यादव : आप पेटेन्ट के खिलाफ हैं। मैं यह जानना चाहता हूँ कि जो मौजूदा कानून आप के सामने है, अगर इन्में संशोधन कर दिया जाये तो क्या उस से आप की आवश्यकता पूरी हो जायेगी। किस प्रकार का संशोधन करने से आप को प्रोटेक्शन मिल सकती है ?

Dr. C. V. Deliwala: Sir, the present Bill is alright except that whenever "Patent of Right" has to be marked it should be possible to obtain the licence quickly.

डा० झाला : ज्वायंट सिलेक्ट कमेटी के सामने जो बिल है, उस में थोड़ी सी दुरूस्ती करनी चाहिये। इस बिल में पेटेन्ट राइट के लिये दस साल का पीरियड रखा गया है। हम चाहते हैं कि सात साल से ज्यादा पेटेन्ट राइट न दिया जाये। हम यह भी चाहते हैं कि जिस दिन पेटेन्ट फाइल किया जाये, उस दिन से सात साल गिने जायें—जिस दिन पेटेन्ट सील होता है, उस दिन से सात साल न गिने जायें।

हम यह भी चाहते हैं कि कम्पलसरी लाइसेंस आसानी से मिल जाये। कितनी चीज का पेटेन्ट निकाले जाने के बाद अगर यह मालूम हो जाये कि वह चीज कोई दवाई बनाने के काम में आती है, तो अटोमेटिकली पेटेन्ट आफ राइट मिल जाये जिस से किसी आदमी को वह दवाई बनाने में तकलीफ न हो। अगर कोई

दवाई किसी दूसरे देश में बनती है, और वही दवाई अगर कोई हमारे देश में बनाना चाहे, तो उस में कोई तकलीफ नहीं होनी चाहिये। अगर वह उस दवाई को जल्दी और सस्ती बना सके, तो उस को पेटेंट आप राइट मिलना चाहिये।

श्री रामसेवक यादव : क्या आप दवाओं और दूसरी चीजों में कोई फर्क करते हैं या आप दोनों के लिये एक ही समय जरूरी समझते हैं।

डा० झाला : हमारा सबमिशन सिर्फ दवाओं के बारे में है चूँकि हम किसी दूसरे फ़िल्ड में स्पेशलाइज नहीं करते हैं, इस लिये हम ने दूसरी चीजों के बारे में कुछ नहीं कहा है।

Shri Kashi Ram Gupta: What is the total annual budget of the Haffkine Institute? And what amount is spent annually on research out of it?

Dr. H. I. Jhala: The total annual budget of the Haffkine Institute is near about Rs. 80 lakh. The staff that is given to me is a combined staff. It also does research; it also does production; it also renders public health service and also carries out other activities of the Institute. Therefore, it is not possible for me to say this very definitely.

Shri Kashi Ram Gupta: If the Research Department is given under your control and it is totally modernised, what in your opinion should be the outlay on such a modern research institute under present day circumstances?

Dr. H. I. Jhala: There already exists the C.S.I.R. Laboratory—the Central Drug Research Institute, which can be taken as an example and followed.

Shri Kashi Ram Gupta: Are you aware what is the total outlay on the C.S.I.R.?

Dr. H. I. Jhala: The total outlay on CSIR is round about 11 crores, but I do not know the total outlay on the Central Drug Research Institute Lucknow.

Shri Kashi Ram Gupta: You are also engaged in commercial aspect of the drugs. You get patents. How many patents have you got at present?

Dr. C. V. Deliwala: Sir, we have taken about 12 patents.

Shri Kashi Ram Gupta: How many patents have you got at present?

Dr. H. I. Jhala: May I supplement the answer to the question. The patents that we take out are not with a view to have large scale production on the premises of the Haffkine Institute. The Institute does not want to produce large scale products for itself. It would lease out the patents and it leases out the patents by a public open auction or through a tender.

Shri Kashi Ram Gupta: How many patents have you evolved and how many evolved patents have been given out to the public?

Dr. H. I. Jhala: 12 patents have been taken out and we worked on the patents regarding sulpha compounds—I will tell you the number—and also we worked on the anti-diabetic drug patents and we are able to produce these drugs on the laboratory scale, Dr. Deliwala will supplement it further.

Dr. C. V. Deliwala: Sir, I would like to make it clear. If the information is put to public use it is better. In case where the foreign firms have been charging an exorbitant profit and when the drug is not available, we only work and carry out research for that particular product only and that is why the number of our patents is very small. The idea is only that.

Shri Kashi Ram Gupta: You have got 14 patents. I want only to know the period.

Dr. C. V. Deliwala: That has been during the last about 15 or 20 years.

Shri Kashi Ram Gupta: So, it means the commercial side of it is taken care of by the firm. Now, do you give at lumpsum money or they pay the royalty.

Dr. C. V. Deliwala: Well recently we have started the royalty system. When we started that then there was trouble and the case has been already going on before the court. Further, we are not motivated for producing drugs unless there is a specific need in the field or where high price is being charged. But having got the patent we try to manufacture for our own requirements on the pilot plants. In regard to the patent we have sold, whenever we have tried to sell a patent, there is always litigation and the court case is pending in the Bombay High Court with the result that the lessee has not been able to exploit it and supply the same to the country.

Shri Kashi Ram Gupta: My point is this. Out of these 14 how many have been given on lumpsum basis and how many on lease money?

Dr. C. V. Deliwala: The tender requires two things, i.e., what will you give as an outright lumpsum to begin with and royalty every year.

Shri Kashi Ram Gupta: Those which are not under litigation are they being worked?

Dr. C. V. Deliwala: The current patent, i.e. tollmitamide is under litigation and it has taken 6 years. As far as the second patent about anti-diabetic drug is concerned the preparation cannot be released until the first is cleared.

Shri Kashi Ram Gupta: How many patents are there which are not un-

der litigation and they are being worked?

Dr. C. V. Deliwala: The earliest patents have lapsed. There is no possibility of exploiting the patents if has no commercial importance.

Shri Kashi Ram Gupta: What in your opinion, if a private sector firm is there, should be the outlay so far as the basic research is concerned in that firm?

Dr. C. V. Deliwala: I would like to give my opinion. I would not advise at the moment that all the pharmaceutical firms should take up basic research. What we want is that pharmaceutical firms should take up reasearch only in the development of the old drugs, develop the technology and bring down the prices. The work on the research of a new drug requires tremendous amount of money. It is a gamble. If you get, it is all right; if you do not then you are frustrated to carry out further research. So, initially for few years the pharmaceutical firms should do research on the development of technology and prepare the drugs in such a way that the drugs would be made available cheaper in the country.

Shri Kashi Ram Gupta: What will be amount required for such a laboratory?

Dr. C. V. Deliwala: This will not require much money. For whatever money they will spend they get the benefit from it. If they go for research blindly it is possible for these 10 years they may not get anything. Research is a gamble.

Shri Kashi Ram Gupta: Please see to page 3, first para from line 7- are the results of selfless and devoted research workers, clinicians, surgeons, pharmacologists, and others belonging to a host of disciplines of research who have shared, share freely their findings, results of experiments, new discoveries and made them known by publishing all the details, the know-how, without

waiting for taking out patents, without expecting monetary gains. Even in United Kingdom, by tradition, inventions concerned in the medical and agricultural fields are not patentable. I want to know of which period you are speaking about these things.

Dr. C. V. Deliwala: Even today, Sir, if any surgeon devises a method to operate on heart, it is a research, his technology is not patented. He does not get any benefit. So a lot of clinicians, surgeons, biologists are not in the field. They have been working on the fundamental research and on the work they have done the new drugs have been found out. Now realise the importance of that work. Behind the scenes a large amount of work is being done in the hospitals, etc. They have been working continuously to do something for the alleviation of the human suffering. That is also research. But there is no patent. It is in this particular field that there should not be motive only to make profit.

Shri Kashi Ram Gupta: You have given us to understand that you are against the commercialisation of pharmaceutical industry. For this, taking over of all research by Govt. interests will be necessary. There should only be public sector industries, to produce medicines. The whole nation should be covered by compulsory health schemes. There will be no private selling. The whole population is covered by the health insurance schemes. Then all this profiteering will go away. Are you in favour of it.

Mr. Chairman: You put this question to the CSIR representative.

Dr. C. V. Deliwala: Excuse me I am not capable of answering it.

Shri Kashi Ram Gupta: You are against commercialisation then what else can be done? You say you are in favour of 7 years. Does it mean

that those companies should have only light research?

Dr. C. V. Deliwala: I have put it down tentatively. In the earlier years they have been able to take out all the profits because they have been charging very high prices. Why we give patent to a person is because we want him disclose something which he has laboured upon and also that the public should get benefit of it some time.

Dr. C. B. Singh: Now from your statement it is seen that by your spending Rs. 80 lakhs—your annual budget—all the time your activity has been just to try to find out and copy from the drug products produced by the foreign companies which are sold at very high prices. Has that been your activity?

Dr. H. I. Jhala: In one of the departments, yes.

Shri C. V. Deliwala: In one of the Departments.

Dr. C. B. Singh: In one of the Departments?

Shri C. V. Deliwala: We have been doing work of new production also. But while working on this, we are going into the problem a little basically.

Dr. C. B. Singh: But, unfortunately, nothing has been done according to your statement. Hardly anything has been done. That is your own statement. Your main activity has been to bring down the prices of foreign drugs. This has been the reply given by you.

Shri C. V. Deliwala: It is a gamble.

Dr. C. B. Singh: We know that sort of thing very well. I was wondering and I thought that probably you must have devoted some of your time for the solution of some of the

problems. But your main activity has been entirely to bring down the prices of drugs which are being imported at a high cost.

You have been spending Rs. 80 lakhs every year for the last 20 years.

Shri H. I. Jhala: Eighty lakhs? Rs. 80 lakhs is not spent on research. There is a misunderstanding. This is the total. Only one Department is concerned with this activity, and there are other activities also. This is not quite correct.

Dr. C. B. Singh: Your own statement.....

Shri H. I. Jhala: I have made it clear now.

Shri P. K. Kumaran: Some witnesses have stated before this Committee that supposing the patent law is not there, in that case sub-standard drugs may come into the market and development may be hindered. What would you say?

Shri H. I. Jhala: That was in those days. Today, the Drug Controller is there. Any drug has got to be passed by the Drug Controller. It has got to go there.

Shri P. K. Kumaran: Can you suggest something to bring down the prices of manufacture in India, because they are costly. Can you suggest something.

Shri C. V. Deliwala: I have already suggested that it will be possible to reduce the cost of manufacture when there will be good competition. There should be no monopoly. Pharmaceutical firms invariably exploit the patent monopoly and charge exorbitant prices for their patented products. To justify this fantastic level of exploitation these monopoly firms often argue that they have to keep these high prices to recover the huge expenditure that they have always to incur in the re-

search and development of new drugs. However, through investigations it has been found that the maximum expenditure incurred by these firms was only 6 per cent of the total sales on research whereas they spend as much as 25 per cent of the total sales on propaganda and high-pressure salesmanship.

Shri Peter Alvares: We are all aware of the national service of the Haffkine Institute. Dr. Jhala told us that the annual income of the Institute, as a non-commercial organisation, is a crore of rupees. Suppose they had commercially exploited their products, what would have been their annual income?

Mr. Chairman: How can he say that? It is a hypothetical question.

Shri A. T. Sarma: You have pointed that the prices of Indian drugs are cheaper than those of foreign products? Are they of the same efficacy?

Dr. H. I. Jhala: Yes.

Shri A. T. Sarma: Then why does not the Indian product have a proper market in India?

Dr. C. V. Deliwala: That because of the high power salesmanship of foreign concerns.

Dr. H. I. Jhala: Tolbutamide, for instance, was being imported by four or five firms from other countries for some years and they were selling it cheaper than the firm with the patent. The matter was taken to court and the import was stopped, and the patentees go on selling it at a high price. It is you who can remedy it. The litigation procedure should be curtailed.

Dr. C. V. Deliwala: They collect a lot of money by selling these drugs at a very high price. This money they again spent on their sales organisation. It is a vicious circle.

Shri R. P. Sinha: The witnesses said that 14 new patents were taken out by the Haffkine Institute, out of which two are under litigation. I would like to know whether any commercial benefit was drawn out of the other 12 patents they have taken out? Out of these 12, how many have you leased out?

Dr. C. V. Deliwala: None.

Shri R. P. Sinha: You were complaining a lot that patents are taken and not being worked. You have also done the same thing. In your experience, which time does it take for a new drug to get clearance from the clinical research of the Controller of Drugs?

Dr. C. V. Deliwala: That I will know only when I find out a new product. These were old drugs for which we have taken out patents.

Shri R. P. Sinha: When you have got a pilot project in your institute, can you tell me if you have ever tried to find out what time it will take to develop this into a commercial manufacturing stage? I mean the development of a known thing. I want your own Indian experience; not others'.

Dr. C. V. Deliwala: There are drugs and drugs. Some have got eight stages. If you want to develop a substance right from the basic chemical, it will take a long time.

Shri R. P. Sinha: What is the average time taken?

Dr. C. V. Deliwala: It will be six months to one year. It all depends upon the stages involved in the manufacture and the equipment required, etc.

Shri R. P. Sinha: You told us that the period must be five years. But there are several factors to be taken into account for bringing out a patent. If you do not have these under consideration, how can you tell us it takes five to seven years? I cannot

understand it. You must give it from your own experience. We can also learn from others.

Mr. Chairman: He has no experience.

Shri R. P. Sinha: The witness has been saying that the life of a new drug is hardly five to six years. Then why does he recommend a patent for seven years. How can the public get the benefit if the life is only five years and when he says that the patent should last for seven years?

Dr. C. V. Deliwala: I am giving two more years leniently, so to say.

श्री चौरङ्गिषा : मैं यह जानना चाहूंगा कि जैसा आपने बताया कि खोज करना एक गैम्बल है और आपकी बात तो दूसरी है, सरकारी काम है आपका, आपका तो बराबर जो भी खर्चा है वह सरकार की तरफ से मिलता है, मगर एक व्यापारी अगर इस गैम्बल के झगड़े में पड़े तो उसको उस की आमदनी रिकवर करने के लिए और कुछ खाने पीने का इन्तजाम करने के लिए कितने वर्षों की अवधि दी जानी चाहिए जिससे कि वह अपनी खोज का पैसा भी निकाल सके और अपने बाल बच्चों का पालन पोषण भी कर सके।

डा० झाला : जो हाफकिन्स इंस्टीट्यूट है वह सरकारी डिपार्टमेंट तो है लेकिन वह भी अपना वैलेंस शीट कार्मिशियल तरह से बनाता है। ऐसा नहीं है कि वह कार्मिशियल तरह से अपना काम नहीं चलाता है। अपना कारोबार चलाने के लिए उसको भी कार्स्टिंग करनी पड़ती है, कैपिटलाइज करना पड़ता है, प्रोफार्मा एकाउंट वगैरह बनाना ही पड़ता है और हमारा यह ख्याल है कि उसके लिए जो आपने कहा, सात साल का समय जो है वह हमने उसका विचार करके ही बताया है।

terms expenditure, output and out-turn. So, I just wanted to clarify it.

Mr. Chairman: Thank you.

(The witnesses with withdrew)

(The Committee adjourned to meet again at 15.30 hours)

(The Committee re-assembled at 15.30 Hours)

III. Mr. J. F. Monnet, Chambre Syndicale Nationale des Fabricants de Produits Pharmaceutique, 88 Rue de la Faisanderie, Paris—16.

(The witness was called in and he took his seat)

Mr. Chairman: Mr. Monnet, whatever evidence you give will be printed and distributed to our Members of Parliament. Even if you want any portion of your evidence to be confidential, that will be printed and distributed to the Members of the Committee. We have received your memorandum and it has been circulated to all the members of the Committee. If you want to add anything or stress anything, please do so. Afterwards, our members will put some questions to you.

Mr. J. F. Monnet: Mr. Chairman and Members of the Committee, before entering into my expose, will you permit me to thank you for having accepted my request to come before you, which is a very great honour to my own person and which I consider a homage to my country that has had so good and friendly relations with you in the past and which will certainly be reinforced in the future. I have been particularly sensible to the fact that you in this country have created this hearing, calling for foreigners in a matter which might have been considered by you as really a

national problem on which others should not have any say. It is the privilege of great nations and the privilege of great democracies to be able to take such decisions. I have not seen any similar decision being taken in the world except in the USA back in 1945 when I was called at a hearing on their Bill for extension of priority rights for patents that had been lapsing during the war. In that case, foreign countries were directly interested. Your decision in my opinion is the first of its kind and for this I pay my respect to you and to your Parliament.

Since all of you, members of this Assembly, have read my expose, I do not think it is necessary for me to read it again. It may be waste of time. However, I think some additional information, giving more details, might be of interest to you. In my first paragraph, I have mentioned that the patent system has as its first objective the industrialisation of the country where it exists. The advantages and benefits derived from the ownership of patents are subsidiary to this principal objective. In other words, to the inventor it is a lure to bring into the country his skill and knowledge. Many authors on this subject have often confused the picture by claiming that the patent is a monopoly granted to a certain individual or a company. It has to be clarified in the beginning that it is a temporary monopoly, just a facility given to him to help the industrialisation and development and the forward move of the country which grants him the patent. You have had the same idea, the same principles, when the patent law of 1911 was enacted, and it seems that you have experienced the same abuse from the patentees for which you are trying to find remedy. The same experience exists all the world over, and my purpose in coming before you is to put at your disposal the experience of a man who has lived forty years in the field of patents. I started my career in this field and I am still in

it. I lived with it for these forty years, witnessing several changes the legislation has been subjected to in my country and also in other countries. I think this experience may be useful at a time when you want to polish up your own rules in view of the welfare of your country and also for aligning your legislation with the great principles and rules which are adopted in other free and liberal countries.

I now come to the French law. You have seen from my paper that the French law dates back to 1844, a time when industry in general was not very broadly developed, with our chemical world in complete infancy and pharmaceuticals practically non-existent. Therefore, you are not surprised that the French legislator did not provide in those days any special measures for chemicals to be put on the same category as any other industrial product. For pharmaceuticals, since at that time there was no question of synthesis of such products but there were only the products extracted from natural sources like opium etc., they decided that on those products there was no question of granting a patent which might act as a monopoly force and, secondly, as a way for some unscrupulous fellows to claim that with their patent they had some kind of a guarantee that their product is good and then make the patients and the public believe like that.

I do not want to add anything to what I have written about chemicals. As you have seen, since in other neighbouring countries like Germany they were reluctant to grant patents covering the products by themselves and had accepted patents only for the processes to manufacture them, many authors in France said that we were in an uncompetitive position with the Germans because when an invention is made in our country of a new chemical a monopoly is created and nobody else can enter into the manufacture of such products while in

Germany the reverse is true. I may say that for a while this could find some support, and in respect of certain dyestuffs there was at that time a patent called the "verguin patent" covering dyestuffs unknown before, and since in Germany and Switzerland no patents could cover the same product, imitations were made in those countries which were not allowed to other manufacturers in France. This is the only example that might be quoted, but it has been certainly very broadly discussed in lawyers' circles and industrial circles.

Since then the chemical science has developed very largely and with the years it has been found that processes for the manufacture of a product could be devised besides those described in the patents without difficulty in using the skill of a chemist coming from the university, and in all the countries where patent is limited to the processes they have tried to find ways to apply the coverage of their patent more broadly than the processes which are actually described in it. I am sure that any German you may have had appearing here has told you all this story.

Therefore, in France, seeing this development in the countries of process protection, if I may call it this way, we finally decided that our law was not that bad, and the result has been that chemical industry in France has really tried with very big success in many cases under our system with the environment of this development of chemical science. I may add that in the final draft for the European Community which is going to apply to the six countries of the European Community, there is no longer any exception for the chemical products, and this is actually accepted by all the countries of the European Community except, I must say, the Italians, which have made some reserves regarding chemicals for pharmaceutical uses but these reserves are limited to a period of adaptation which has been

estimated so far by the Italians themselves to ten years maximum.

Now I come to pharmaceuticals. I have given you a broad outline of the development of our legislation in this field. May be, I should add to it some legislation, which was not exactly within the subject but which might be of interest to you. There was a legislation which was issued in 1953 relating to compulsory licence of process patents for manufacturing pharmaceuticals. At that time, because of the pressure of the sentimental or emotional side in certain medical circles, instead of the mere application of the patents and compulsory licence after three years under the International Convention in a case where the patentee had not used his patent in the country, the French Government thought it proper to create for the pharmaceuticals a special system whereby compulsory licence would be open to claimants before the expiration of the three year period. So, it was done because of the worries of the medical profession. They say that these three years might be too long and it would be too bad that because of this limit of three years and because the patentee himself does not work his process and does not market the product, the people could not have the treatment they are entitled to. So that, this compulsory licence was instituted. The result has been very revealing on the side of the authorities for one reason. Since 1953 the development of this industry has been very remarkable. After the product has been invented, it takes a long time before you can market it and put it at the disposal of the population. The reason is that new products manufactured by synthesis are more and more potent. It is one of the grounds for their patentability that they should be an improvement on the past. Their potency is very often paid for by some toxicological effects which have to be very carefully studied and avoided. Since 1953 it is very seldom in my country—it has never happened in other countries that a product

should be tested, studied, controlled and put on the market before these three years after the patent was issued. Therefore, this delay of three years, even if you cancel it, makes no difference practically for the pharmaceutical industry.

This legislation of 1953 has one particularity. It created conditions for the granting of compulsory licence. The compulsory licence was not open to anybody and for any ground. The conditions that were put by the legislation were that compulsory licence should be granted only if the patentee himself or his associate or licensee has not put on the market the product in sufficient quantities for the need of the population or if the prices were exceedingly high. Because of this legislation, it was in the interests of the industry to make the product in large quantities and put on the market only the best quality.

The question of price was raised only in one instance, namely, the case of Vitamin B-12. May I tell you that story, as there is nothing secret in it? Vitamin B-12 was made in France by my company under a licence from Merck and Company of USA, who were the patentees, and we were putting it on the market when another company in France claimed that our prices were too high. As a matter of fact, our price was the same as the price in USA and other countries of the world. But this party claimed that our prices were too high and they requested for a compulsory licence. Meanwhile, they started production. Unfortunately, because it was the beginning, very big investments were to be made.

Shri R. P. Sinha: What was the price of Vitamin B-12?

Mr. J. F. Monnet: The price at that time was 90,000 old francs a gram. In the United States also it was the same price. This third party put it on the market at the same price as ours. Therefore, the Commission, which was

in charge of granting the compulsory licence, said, "If you cannot prove that the actual user of the process makes an exaggerated profit by selling yourself at much lower prices, your case means nothing" and the licence was not granted.

Since then I may tell you that the prices of vitamin B-12 have come down very seriously. The price now is about 40 US dollars a grain, that is, 200 francs. You, gentlemen, might be surprised by such prices and such differences but the explanation is simple. Every time we have a new product coming from our researches, these researches as you may imagine are very expensive and apply not only to the products which are found successful but also products which we are obliged to discard for one reason or another. We have to amortise those expenses and we have also to invest in the facilities for manufacturing the new product.

When speaking of vitamin B-12 or any product obtained by a fermentation, the investments are very, very big indeed because the yield of the production is very small. To give you an example, in the preparation of vitamin B-12 by fermenting big fermentor the fermentations last for about four or five days and at the end of fermentation the extraction of vitamin B-12, which is a very long and complicated procedure, gives about 500 grammes out of 80,000 litres. That is what makes the price so high. After some years when the process is developed, when we have been able to put together several of these processes, improved the extraction of the product and amortised the expenses, we are able to lower the price and sometimes considerably. We industrialists have, as much as you statesmen, the care of the public health because it comes within our business and it is also a duty we feel very deeply. So, when we can lower our prices, we do it. You have probably seen that in this country, like in other coun-

tries, the products which are not under patents have their prices stable or even increasing with time while for all the patented products the prices have always decreased since their first entry into the market. This is a diversion for which I apologise but, I think, this example was of some interest to you.

Shri R. P. Sinha: How many old francs were equivalent to a dollar?

Mr. J. F. Monnet: 500 to the dollar in those days; but, since then, please do not forget that there has been a devaluation in France and the dollar representation is not quite accurate. However, it gives you an order of magnitude.

I have nothing special to add to the general principles of the invention in the field of pharmaceuticals. You have heard probably all the people who have come before you, giving you the general gist of it. The invention of the pharmaceutical product is more in the product itself than in the process being the application of known methods within the scientific field of chemistry.

Now I come to the remedies you thought of and the fear of abuse from the patentees of their dominant position. In France, we had this law of 1953 which has not been worked out. In 1960 a new law was enacted covering the products themselves. You might be surprised that France, starting from a state where no protection was granted in the field of pharmaceuticals, passing through a phase where the processes only for their manufacture were patented, finally in 1960 decided to cover the products themselves. For this, I think, the best information I might give you is the translation of some parts of the *Exposé des Motifs*, what you call in your book relating to the Bill, the Statement of Objects and Reasons. The title of the law is called, *The Reformation of the Regime of the*

Manufacture of Pharmaceuticals—I translate it very bluntly.

This reformation has for essential purpose a solution to two big problems. One is the protection of public health; how to avoid the marketing of pharmaceuticals not sufficiently studied out and, therefore, dangerous for the population. The other is of an economical and financial nature, the number of specialities and the protection of the inventor.

The solution of the first problem is found in the official control of the manufacturing techniques and of the raw materials and the final products before authorisation for sale. For what concerns the second problem, the solution is the creation of a special patent. This solution gives the answer to two pre-occupations. The first one is encouraging scientific research by giving the inventor a guarantee that he shall not be deprived of his invention. The second one is hindering the multiplication of specialities which is justly complained of in France by medical doctors, pharmacists and social security offices." If I may emphasize on this, in 1960, there was a proliferation of specialities under different trade marks and names containing the same active product. Medical doctors, pharmacists and social security offices complained of that situation because it was confusing. No medical doctor knew which of them to prescribe. Pharmacists had to keep very huge stocks unnecessarily since the same products were produced a hundred times. Social security offices were completely confused whether they should select this one or the other one or all of them or part of them. It was a complete mess. The decision of the legislators is well-justified in that sense.

"The patent system is the only means by which the inventor is sufficiently protected for the reward of research and it also prevents the unnecessary multiplication of identical products". I think I have given the

gist of the French law and the reasons why it was enacted.

I am not going nor want to enter into several measures that you have provided in the Bill of 1965 for avoiding abuses of monopoly. But I may tell you that our experience has been really a long-range one on a great number of products and this experience has shown that in consequence of the mere threat of compulsory licensing which is refused, as I told you, on these conditions, namely, no delay in marketing, sufficient quantity in the market, good quality of the product and reasonable prices—these conditions being followed by all the inventors there has not been brought any action before the courts. No necessity has been shown of increasing the hurdles for the inventor, for it is also one of the purposes of the law, to put more and more new products at the disposal of the population.

Thank you, Mr. Chairman, that is all I have to say.

Dr. C. B. Singh: Mr. Monnet, you have just mentioned about the European Common Market and you have further mentioned that in Italy, while agreeing to the patent system, they have put in a period of 10 years. May we know why in Italy, where there was no patent in the drugs industry before, they have agreed to put in 10 years period before they completely come under your rules and regulations which you are making for the European Common Market?

Mr. J. F. Monnet: To answer this, I think, an Italian would be in a better position than myself. I am not an Italian and I have no contacts with the Italian legislators but from what I hear either on the side of industrialists or on the side of the people close to the Government in Italy, I imagine this delay was for adjusting progressively to the ideas in their

country to that protection. In a place where complete freedom towards protection has been practised, to take very strict measures which pass from one end to the other, it is very probable that the patent authorities have requested for this delay. I know and probably you may have heard it from the Italian representative who appeared before this hon. Committee that the drugs industry in Italy resent the fact that they cannot have any protection and have been claiming for the establishment of patents in this field. A draft Bill has been brought before the Italian Parliament several times for at least 15 years to establish patents in the field. But this project has unfortunately failed because the Government went out of power; the new Government came and had to take care of more urgent legislation and this is what has delayed measures in Italy so far. For the future they probably feel—not in the industrial circles nor in the scientific circles, but in the general administration circles—that a sort of progressive measure should be taken to be in complete alignment with other countries. They, as I told you already have fixed up to ten years. This request is already two years' old, which means 8 years are left from now.

Dr. C. B. Singh: From your experience in France, you have laid a stress on patenting products rather than processes. But we, in our Bill, have got slightly different ideas; we have, more or less, laid stress on processes rather than on products. With your long experience in this branch and in the modern study of chemistry, would you please tell us this: if, in our Bill we include process-cum-product for patent, would that be an improvement?

Mr. J. F. Monnet: You are free to legislate what, you think, is your best interest. My feeling is that by having process patent excluding the product, you will probably have the same embarrassment as we had in France at

the time when only processes were patented. These embarrassments and sometimes injustices are as follows:—

In a process patent system, it is practically impossible that every possible process could be drawn and described in the same patent. Methods in chemistry are improving more and more at an accelerated pace and there is nobody who can say, "well, there is no other method for the manufacture of the product of my invention and I feel safe". Therefore, what happens? Suppose an inventor of the product is a scientist in a University of yours or a scientist in another country. He will get the patent to cover the process he has invented. Then the patented product of the man who has had the genius, the idea of the product, who has tested it on animals, who has checked the value of it will come out. Then what will the competitors do? What will the industrialists do? According to their staff in chemistry, they will say, "look there is a Researcher who has invented a process for a wonderful product, but look what protection he is claiming. It is limited to that process. You fellows in the research division should take interest in devising other methods and other processes to make it." And these people will find processes within three months or six months and then the industrialists will apply for patents to cover their own processes. When the scientist, the man who has brains will go to an industrialist—because he himself is not an industrialist or has no means to set up an industry for exploiting that process—to grant a licence or to sell his invention, this industrialist will tell him, "my dear Sir, you have covered the process and I have to start in competition with the other industrialists who have their own processes; I cannot pay much for your patent." And the inventor will really be stolen of his invention.

Dr. C. B. Singh: In our Patent Bill we have, more or less left the appeal for any dispute, from the Controller of Patent Rights, to the Government

and we have done this for a special reason. Our experience has been that, on flimsy grounds, court proceedings have been going on and cases have been delayed for 10 or 15 years. What do you think about this?

Mr. J. F. Monnet: My answer, according to my own experience, is this. We, in France, have always a tendency—in the political circles as well as otherwise—to submit any dispute on whatever cause to the normal tribunals and courts because according to the procedure defence is assured the same conditions as the prosecution and a fair treatment is given in the courts.

I understand your objection—I would not say our courts give decisions rapidly unfortunately, we always complain about the slowness of our courts' disposal—the delay in disposal of cases by courts. In France we have a special procedure—I would not speak of any other country because I am not a lawyer—I am an industrialist—I know some problems not in sufficient details but I know how things happen in France. It is possible in France to claim, to ask from the Judge, in case where the interest of the parties or one of the parties is strongly at stake within a short delay, for a direct procedure which we call appeal at a fixed date. Then the court agrees to decide on that fixed date which is made up between the President of the Court and the parties or their representatives. That is how we solve this problem.

You will tell me that this is not a complete solution because there is always in France a recourse to the Supreme Court and therefore, the infringer has still a chance to take before the Supreme Court. I may tell you that an industrialist or a second inventor careful of his company's and of his money, if he has an action against the patentee and even if he has a just case for taking recourse to the Supreme Court against an adverse decision, at this stage puts a severe

brake on his activities for if the chances are that his recourse to the Supreme Court will delay the decision he will have to pay increased money for the operations he is still conducting if he loses.

Dr. C. B. Singh: In your memorandum you have mentioned:

“From the standpoint of economics, it might have been feared that the exclusivity thus granted to the first inventor of a pharmaceutical would lead to abuses, mainly to prices of pharmaceuticals at unreasonable and intolerable heights”.

In this country the record is there that our prices differ from international prices; the prices are put up rather high by these patent holders. Under these circumstances when such abuses take place what will you suggest? We have got this compulsory licensing system. What will you suggest in your own way?

Mr. Chairman: He has said that he has no comments to make on this point.

Dr. C. B. Singh: I would like his opinion on that.

Mr. J. F. Monnet: You know our case. I may say just as I remember that my company or the subsidiary of my company who has firms in this country is not touched by your objection which shows that I do not have any experience of that.

Mr. Chairman: By and large do you agree with the provisions that we have made in order to present such abuses?

Mr. J. F. Monnet: Oh, Yes, Some remedy should be made for the abuses and you know as I told you, we do not have any abuses in France because in our law we have provided for this, especially in the case of excessive prices which is exactly what you are referring to right now. In

our law of 1960 it is said that a compulsory licence should be granted immediately if the patentee abuses his monopoly through excessive prices. What is an excessive price is a difficult point to decide and this sometimes may create confusion. I can give you an example.

Dr. C. B. Singh: You have mentioned Vit. B12. The initial price of Vit. B12 was Rs. 2000 per gram and now the price has gone down and it is Rs. 40 per gram.

Mr. J. F. Monnet. Yes, it has dropped substantially. Why? The reason is: When we start with a product we do not have the techniques to produce it in large quantities by simple processes. We have to put up very big installations for a yield which is practically nothing. I told you that for getting 500 grammes we required 80,000 litres of raw material, and this amount we got after trying many different processes. Naturally, at the beginning the cost price is really high. As we go on improving the processes and as the yields increase due to researches and further trials, the price comes down. I was giving you the experience of Vit. B12 and you confirm it with your figures.

I may recall the penicillin story and I must add that penicillin was not under any patent. It was a free product. I remember, in 1945 when Penicillin came to our country it was not a pure product; and for a small bottle we had to pay two or three dollars. Everybody sold it at this price. There was even competition in this field. So penicillin started at this price. Then improvements were made and now you get a crystalline product which is pure. The prices are completely down.

Dr. C. B. Singh: Having in view experience of that type, what is the remedy for that?

Mr. J. F. Monnet: The remedy comes naturally by the fact that the pharmaceutical industry is obliged by their

own sense of public health. They have to take care of that. Also there is the need of increasing their production. It is natural in any industry. When you produce in low quantities, you are never satisfied you should be able to produce in larger quantities and the common people should be able to purchase because there is no purpose in producing big quantities and find that only about 200 people are able to purchase the product. Then there is a natural tendency to lower prices. The prices of patented products have come down in many countries. For the other products the problem is different. And now, about your contention, there are some industrialists who, instead of yielding to this natural trend of lowering the prices when they improve their processes, maintain their prices high. I agree with you. A remedy should be found.

Dr. C. B. Singh: Our experience has been that the prices of patented drugs have gradually been going down. What is the state of prices of pharmaceutical products which are not patented? I want you to compare the two sets of figures.

Mr. J. F. Monnet: Well, it is difficult to compare because by nature a patented product is new and it is not only new, but it has to be superior to the old ones; otherwise it would not sell. Therefore if you compare a new product to the old one either it is better than the old one or it would not sell, and in that case the patent itself should not have been granted at all.

Shri A. T. Sarma: What is the time prescribed for patent protection in France?

Mr. J. F. Monnet: It is 20 years from the date of application and this delay is exactly the same for the special patents for medical products. I know that you have a feeling that in the field of pharmaceuticals, this delay may seem too long. Maybe if

I had been 20 years younger or rather if we were 20 years before this year, I might have granted some merit in this. But now I am positive that the delay for pharmaceutical products has no reason to be shorter than that for other products for the simple reason that here, more controls are necessary for an invented product to be put on the market. When I speak of controls I speak of experimentation in biology, in physiology and clinical experiments. And you know how anxious are the health organisations in all countries—in the United States, in France, etc.—to be sure that pharmaceuticals do not have any tonic effects or side effects which might impair public health.

Shri R. P. Sinha: I would like to seek one clarification from the learned witness. He was talking about Vitamin B-12. You have said that the price of Vitamin B-12 dropper from 90,000 Francs to 40 dollars. You have explained the reasons also. I would like whether the price dropped down to the level they dropped as a result of the endeavour of your company or at that time the prices dropped because there were more than one manufacturers manufacturing the product under compulsory licence system.

Mr. J. F. Monnet: I do not think competition played any substantial role in this. Maybe there has been some but not initially anyhow. The fact is that, as I told you, at the beginning protection comes really when there is difficulty, but since, the processes have been very very substantially improved and with these improvements and with the desire to sell as much as possible of the product, the manufacture has been increased in quantities with better yields and then the prices have come down. You suggest a sort of competition. There is, in fact, some competition. I will tell you what I feel about it. That

Patented products are put under some kind of monopoly. These monopolies are local. For instance in Vitamin B-12, the Merck & Company were the patent owners for its manufacture in the U.S.A. We are the licensee in France. They have got a licensee in England; another in Germany and another in Holland and all of them follow their own policies of lowering the prices when there are improvements. Sometimes it happened that Vitamin B-12 was cheaper in the United States than in France and 6 months later we ourselves were able to make it at a lower price. There was no actual local competition, of course.

Shri R. P. Sinha: I would like to understand at what point of time, the Government of France thought it in the larger interest of the country to grant licence. I would like to know from you at what stage, how many years after the product was introduced.

Mr. Chairman: He has said 1960.

Shri R. P. Sinha: In 1960, Vitamin B-12 was introduced, am I correct?

Mr. J. F. Monnet: Vitamin B-12 went on the market earlier than this. Our patent law on pharmaceuticals dates back to 1960.

Shri R. P. Sinha: When was the compulsory licence for its production granted in France to other manufacturers?

Mr. J. F. Monnet: That was earlier than that. As I explained to you at the beginning of my speech, which covered what was not mentioned in my note, there was no basic change in the law itself. At this time we had the process patent only. Then legislation of 1953 simply created compulsory licences for these patents. Therefore the Action on Vit. B-12 was not based on a product patent but on a patent covering the process for its manufacture.

Shri R. P. Sinha: It is not very clear. I would like to understand this. Your Company, as far as I understand, was the holder of patent for the manufacture of Vitamin B-12. They started this manufacture in France. Am I correct, whatever may be the year? After how many years, compulsory licence for the manufacture of Vitamin B-12, after you started the manufacture, was granted to some other company?

Mr. J. F. Monnet: It was not granted. It was even refused. Anyhow the Action was started about 2/3 years after we went on the market.

Shri V. M. Chordia: German chemical industry is more advanced than the French chemical industry. I think so. Do you agree?

Mr. J. F. Monnet: I cannot agree. Excuse me, Sir, just one word I request, Sir, it may be off the record.

Mr. Chairman: Yes. It will be off the record.

Shri V. M. Chordia: The second question is how much royalty you pay out and how much royalty you get?

Mr. J. F. Monnet: This is another confidential question. I am sorry, Sir, I request that this should also be off the record.

Shri V. M. Chordia: How much royalty you pay out and how much royalty you get?

Mr. J. F. Monnet: Well this is another confidential question. I am sorry to request Mr. Chairman that this should be off the record.

Shri V. M. Chordia: I want to know of France as a whole and not particular of your Company.

Mr. J. F. Monnet: I have not seen any statistics of the breakdown of the licences granted and received in any particular field, especially in the field of pharmaceuticals and, there I am

not in a position to give you an answer.

Shri R. P. Sinha: Is it possible for the witness to give a broad figure of the royalties paid out of France and received inside France. I am talking not only of pharmaceuticals but of all the patented products.

Mr. J. F. Monnet: I can give you a broad answer. It pays 600 million francs and it receives between 300 and 400 million francs. I have some remark to make on that because there has been very much publicity recently in several countries relating to this and the general consensus is that except for Switzerland all the important countries pay much more in royalties than they collect. Germany is one of them and France too. Some conclusions have been drawn, especially by lawyers etc., that this was a very dangerous situation. I think it is an exaggerated statement because the majority of licences are granted in countries where we do not work out our own inventions. For instance, when Rhone-Poulenc works out inventions in England May and Baker pays very nominal royalties. The economic balance is made by paying us dividends and profits. These dividends do not figure up in the statistics. The same applies in all the other countries and, therefore, these figures which might lead you to conclude that we are going to a catastrophe, I think, exaggerate the facts.

Shri B. K. Das: When there is any invention for which patent is taken in the pharmaceutical industry in your country does it pay to the scientist something extra over and above his salary.

Mr. J. F. Monnet: This is a very good question to me because there is in the origin of the inventions very many possibilities. In an organised research, that is, in our laboratories where we are organised—I will give you a general sketch this way—there are the chemists; there are the physiologists who are trained to test the chemical products; there are the medical doctors who take care of the

clinical tests. Now these people have meetings and for one reason or other the suggestion may come from one or other.

Mr. Chairman: The question is very simple, i.e. do you pay anything additional to the scientist?

Mr. J. F. Monnet: But, Sir, I have to explain how the origin comes and then I will tell you how we pay.

Mr. Chairman: You distribute the favours to all sections, i.e. the man who experiments, the man who makes the tests, etc.

Mr. J. F. Monnet: Yes, Sir, the man in the chemical laboratory, sometimes there are many of them, the man in the testing laboratory, etc.

Mr. Chairman: What is the share of the scientist who has invented?

Mr. J. F. Monnet: The case of the scientist is different because when an invention comes from an outside scientist, which we have too, he is not within a collective organisation, he himself has got the idea of the product to make. Either we purchase his invention or pay the royalty.

Mr. Chairman: Is he paid by agreement?

Mr. J. F. Monnet: Yes.

Shri Kashi Ram Gupta: From your statement I conclude that the fundamental and basic research is also undertaken by the pharmaceutical industry in joint companies, and not separately by the Government Departments. Is it so?

Mr. J. F. Monnet: Yes. However, there is no difference between fundamental research and applied research. We are obliged to conduct both, and in the field of chemistry for instance, in the field of plastics, we have pure scientists in our own organizations. They derive general principles which

may or may not apply which is really basic research. I may tell you, we have a laboratory devoted to atomic research which is conducting what you may call basic research.

Mr. Chairman: Are there no patents attached to them?

Mr. J. F. Monnet: No. There is no practical basis. You cannot say that anybody who will apply a particular formula will pay five cents or one dollar. That is impossible. Our theory in France is that scientific work is to be paid for itself, without consideration to the results. This research is on theories. It is subsidised also by Government in some cases. Very often you have probably heard that Germany is subsidising some Scientific laboratories. We do too.

Shri Kashi Ram Gupta: What is the general percentage of sales value that is spent on research in the pharmaceutical industry?

Mr. J. F. Monnet: By us it is 10 per cent of all the turnover.

Shri Kashi Ram Gupta: In the French Act, are there some clauses for having licences?

Mr. J. F. Monnet: We have not anything like that. Compulsory licences achieve the object they are meant for. Royalties are negotiable. There is nothing like fixed royalties. It depends upon the case.

Shri Kashi Ram Gupta: These days generally it is said that an invention goes out of use within ten years. Is it a fact?

Mr. J. F. Monnet: That's right. Ten years is an average a good-figure. However, I must confess that 10 years ago, this figure would have been slightly exaggerated. You have heard of the German product which has created monsters. This is the first time in the history of pharmaceuticals that a pharmaceutical has created

monsters. Since then, every new pharmaceutical that is invented or discovered needs to be tested from this angle, before being put on the market, which was not the case before. I can quote many other instances of that nature.

Shri Kashi Ram Gupta: I think you must have seen the model law by the BIRPI. At page 49, the model law states in the commentary that there can be patents for ten years from the date of the sealing of the patent. Are you in agreement with such classes these days?

Mr. J. F. Monnet: I do not agree now or the reason which I have already given.

Coming to the BIRPI model law or project, as other witnesses who have appeared before you must have told you, it is not a law by itself. It is a compendium of clauses which are offered to the several States interested in establishing a law on patents, with different types of clauses which they may or may not adopt. Some clauses may respond more than others to one's objectives. But the total restrictions which are enacted in the model law are not presented as a sort of a comprehensive system. In other words, the model law gives you some clauses which may meet certain objectives. For instance, take the question of the prevention of the abuse of monopoly by the patentee. They say in the model law that at the time of granting the patent, you may make provision for the grant of compulsory licences either generally or by limiting it to certain specific cases.

Shri Kashi Ram Gupta: This model law is for developing countries.

Mr. J. F. Monnet: I know; that is why I say that I completely agree to that law in this sense that each country, according to its state of development, may feel interested in this provision or that one.

Suppose you tell me 'We Indians are not interested at all in the pharmaceutical industry, we have other things to care for; our agriculture is much more important. We do not care very much whether people die of malaria or this or that disease; what we care for is the production of wheat, rice and—I do not know—what else. In between, we want to import pharmaceuticals also; and we want to import them without having any research of our own, without having any research work done here; we shall pay what we can, but we are not interested in having a pharmaceutical industry', then I would tell you 'Do not make any patent law for pharmaceuticals'. But if you have an idea that some of your scientists might be interested in having protection for their inventions, if you have any idea that in your country it would be sound to create a solid and self-sufficient pharmaceutical industry, then I would tell you to enact a law to protect those inventions, and to create an atmosphere which would appeal to the inventors to come and invest in the pharmaceutical industry in your country, but I would say at the same time that you should not put too many hurdles in the way.

Shri Kashi Ram Gupta: Are the pharmaceuticals produced in France consumed in the country to a greater extent than they are exported? Or are the exports more than the consumption in the home-country?

Mr. J. F. Monnet: If you mean the products of our manufacture in my country or in my factory, I may tell you that we export about 40 per cent of our production. If you mean the production by our licensees or other associates, then the figures are completely different, of course. Take, for instance, largactil which is the first tranquilliser that we have invented. This is sold in the USA ten times more than in France.

Shri Kashi Ram Gupta: Are there American patent-holders in your country, and if so, are they doing some research in your country?

Mr. J. F. Monnet: I was referring to a product of our invention on which we have patents in the USA, and which we have licensed over there. In France, the reverse is true; there are plenty of patents belonging to the American patentees, which are exploited in France either under a licence from the patent-owner or through a subsidiary of the American company.

Shri Kashi Ram Gupta: Have you got some patents in India?

Mr. J. F. Monnet: We have tried, but as you know, for the last five or six or seven or eight years, you have not been issuing any patents on pharmaceuticals, and therefore, we did not have to make any application for patents. But we are certainly interested in having patents and working them in this country either through our subsidiary or through licences.

But there is one point that I would like to raise at this time. In companies where there is a big research centre, very often, we make a selection out of the products that we invented and this selection is based on our estimation of the value of the best product that we could market. This selection is necessary for one reason only, but it is a good reason and it is

that when you are in this business, it is not possible to promote in trade more than one or two new products each year; promoting the rest is more or less a fallacy. If each year you gave the commercial people twenty or thirty new products to market, they would not be able to do it. Therefore, we are obliged to select from our inventions. Among the products that we discard surely, there will be some which might be marketable by other companies which may not have the same selection as we have. As a matter of fact, we do not market all our inventions, and we do grant licences to other pharmaceutical houses in France for the products we have discarded for reasons which were not too serious. When we cannot market a product competing with others in our trade we go into competition by granting a licence to another pharmaceutical company.

Mr. Chairman: Thank you very much.

Mr. J. F. Monnet: I thank you and your associates here who have been listening to me patiently and who have made it possible for me, with my poor English, to give my evidence.

(The witness then withdrew).

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1966

Monday, the 11th July, 1966 at 09.40 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Sardar Daljit Singh.
4. Shri Basanta Kumar Das.
5. Shri V. B. Gandhi.
6. Shri H. K. V. Gowdh.
7. Shri Kashi Ram Gupta.
8. Shri Prabhu Dayal Himatsingka.
9. Shri Madhavrao Laxmanrao Jadhav.
10. Shri Braj Behari Mehrotra.
11. Shri Chhotubhai M. Patel.
12. Shri Naval Prabhakar.
13. Shri R. Ramanathan Chettiar.
14. Shri A. T. Sarma.
15. Dr. C. B. Singh.
16. Dr. L. M. Singhvi.
17. Shri K. K. Warior.
18. Shri Balkrishna Wasnik.
19. Shri Ram Sewak Yadav.

Rajya Sabha

20. Shri Vimalkumar M. Chordia.
21. Shri Shyamnandan Mishra.
22. Shri Dahyabhai V. Patel.
23. Shri Mulka Govinda Reddy.
24. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

Dr. A. Joga Rao, Controller General of Patents, Designs and Trade Marks.

DRAFTSMAN

Shri R. V. S. Perisastri, Deputy Draftsman, Legislative Department, Ministry of Law.

SECRETARIAT

Shri M. C. Chawla—Deputy Secretary.

WITNESSES EXAMINED

I. Dr. T. R. Govindachari, Director, CIBA Research Centre, Goregaon, Bombay.

II. *All India Drugs & Pharmaceuticals Manufacturers' Consultative Committee, Bombay.

Spokesmen:

1. Dr. Gurbax Singh, Leader.
2. Shri G. M. Parikh.
3. Shri R. Ganesan.
4. Shri B. S. Giri.

III. *All India Manufacturers' Organisation, Bombay.

Spokesmen:

- | | |
|-------------------------------|-------------------------------------|
| 1. Shri Hansraj Gupta—Leader. | } Members of the Central Committee. |
| 2. Shri G. M. Parikh. | |
| 3. B. S. Giri. | |
| 4. Shri R. Ganesan. | |
| 5. Dr. Gurbax Singh. | |

IV. *Sarvashri G. M. Parikh, H. J. Vaidya and S. C. Nanabhai, Zandu Pharmaceutical Works Ltd., Bombay.

I. Dr. T. R. Govindachari, Director, CIBA Research Centre, Goregaon, Bombay.

(The witness was called in and he took his seat).

Mr. Chairman: Dr. Govindachari, we are sorry we had to keep you waiting because we had to get the quorum. Whatever evidence you give will be printed, published and laid on the Table of the House. Even if you want something to be confidential, that also will be circulated to the members of the committee. We have received your memorandum. It

has been circulated to all the members. If you want to make any new points or to emphasise any particular point, you may do so. Afterwards, members will put you questions.

Dr. T. R. Govindachari: Let me first of all thank the members of this committee for giving me an opportunity to present my views personally before them. I am the Director of the CIBA Research Centre, Bombay, set up 3 years ago to carry out research on pharmaceuticals and dyestuffs.

I would like to ask three questions and answer them myself. Firstly, are

*Their Evidence was read together.

patents essential at all in the pharmaceutical field? My view is they are absolutely essential. Secondly, is the period of 10 years suggested adequate or not? I feel it is absolutely inadequate.

The third question is whether process patent should be granted or product patent. I feel that product patents are absolutely essential and process patents, in my opinion, are not adequate.

Let me explain these three points. First of all, talking from personal experience as the Director of the first laboratory for research set up by private industry in India—this was set up in 1963—I may say that we started operating on 1st January, 1963 though our laboratory was declared open by the late Prime Minister on 21st March 1963, with an investment of Rs. 3 crores and our annual recurring expenditure has been of the order of Rs. 50 lakhs. During the last three years we have made about 4000 new substances which have been tested—biological activity. We have filed nearly 20 patents. Of the 4000 substances which we have tested, only one substance has been sent for clinical trial. That was almost ten months ago. Two other substances have been sent for clinical trial two months ago. Probably, in the next year we may be sending out some three substances more for clinical trial. In all, out of 4000 substances which have been tested, hardly six or seven have a possibility of being used in the clinic. Even out of these six or seven, how many will actually prove to be effective as a drug is a matter which is open to question. My estimate is, it takes at least a minimum of 6 to 8 years, from the point of synthesis of a new substance with potentialities of becoming a drug to the point where it becomes a commercial possibility. In our own experience—we have been operating for more than $2\frac{1}{2}$ years—only one substance which we made about 2 years back

and found to have some pharmaceutical possibilities has been tested in the clinic during the past ten months. These tests have now to be enlarged and that will go on for another two or three more years before we can take a final decision whether it is worthwhile to introduce this drug at all. You can see, therefore, the enormous effort and the expense needed for the development of a new drug. If it takes 6 to 8 years to develop a new drug, you can imagine, by limiting the patent to ten years you hardly give any time to recoup the investment which has been made. New drugs will never come out unless you have vigorous and broad based research work activity. This is the first instance in India of CIBA setting up a research unit, and it may be that by the time we come out with a new drug we would have spent at least Rs 10 crores to Rs. 15 crores. In all possibility the drug may not be a commercial success and we may not be able to recoup the investment. If we are very lucky, very fortunate in hitting upon something which is widely sold all over the world, then we may be able to recover the investment made. Also, our drug research is not aimed particularly to Indian needs the research is aimed at producing drugs that will be useful all over the world. Therefore, if the drug is successful, it is bound to give us back, in terms of royalties, foreign exchange also. The only hope which people who invest money have is that some successful drug will come out. Unless you have patents there is absolutely no way of recovering the investment made. After all, what should go to shareholders is being spent for research now in the hope that something will come out which will reimburse the investment. I feel, therefore, that patents are very essential if we are to stimulate research in India in this particular field. In the present law we have protection for 16 years. That is essential if there is to be any inducement for other pharmaceutical firms to start research on this scale.

Then I come to the question about product patent versus process patent. The apparent cause for advocating the latter is, if you have the process patent you do not protect the product at all. Somebody else may come out with a cheaper process for the same drug and make it available to the public at a cheaper price. This, I think, is not completely correct because any person who discovers a new product is not going to leave any loopholes, is going to think of all possible and conceivable methods of making a particular product. Somebody else may claim that he has developed a new alternate, cheaper process. He would claim that he is making the product by the new method. But as I explained earlier, it is unlikely that he has a cheaper process. In fact he may be making it by the original method and there may be no way of proving it. This will only lead to abuse of the patent system instead of helping the man who has invested so much time, effort and money on research.

These are three points that I wanted to make clear. If there are any questions I would be happy to answer.

Shri Kashi Ram Gupta: In your memorandum you have said that on a scientist you spend about Rs. 1.5 lakhs to Rs. 2 lakhs. The picture you have given roughly comes to this that for research in an industry it requires a crore of rupees. Am I correct?

Dr. T. R. Govindachari: It depends upon the size of the research unit. We calculated that roughly it takes Rs. 1.5 lakhs per scientist. You must have a minimum size. You cannot have one or two people working and expect them to produce any result. You have to have a particular set up wherein there are 10 or 15 people working together, to interact and stimulate each other. If you have only one or two people struggling by themselves, there is not even cross-ventilation of ideas. We

are in a new place. We spend Rs. 50 lakhs a year on our recurring expenditure.

Shri Kashi Ram Gupta: You said that there should be 20 senior scientists, assistants and so on. It may even go to Rs. 1 crore and not Rs. 50 lakhs.

Dr. T. R. Govindachari: We cannot immediately start on a larger scale. We have started on a scale which we believe will produce results. If the results are encouraging we will expand.

Shri Kashi Ram Gupta: Generally it is said that 3 per cent of the sales is spent by the industry on research. Your industry must have about Rs. 15 crores output yearly. It means, naturally, that this industry should flourish in this country. It has a very high capacity to produce and a huge amount should be invested. Is that the picture of the industry in this country?

Dr. T. R. Govindachari: Actually I would say, 3 per cent is not correct as far as pharmaceutical industry is concerned. It may be that other industries spend of that order, but pharmaceutical industry spend much more than any other industry. I am not a commercial man, and I do not know what relation it bears to the actual turnover of CIBA.

Shri Kashi Ram Gupta: You have said that ten years will not suffice. Is it from the date of application or from the date of specification?

Dr. T. R. Govindachari: Date of application. After one year you have to file complete specifications. Actually we have filed about 18 patent applications so far. Of these 18, we have submitted three or four in the course of one year, and more work has shown that some compounds which we sought to protect by patents may have undesirable effects and may

not find use as drugs; in these cases no useful purpose will be served by holding on to the patents. So, even when we take a patent its survival cannot be taken for granted. It is not unusual that even though the initial results with some compounds are encouraging, when we do more detailed studies we find that they are not as useful as we thought them to be and we drop the patents.

Shri Kashi Ram Gupta: You are suggesting 15 years from the date of completion of the specification?

Dr. T. R. Govindachari: From the date of first application.

Shri Kashi Ram Gupta: If we give ten years after the date of grant of the patent, have you any objection to that? It will be ten years from the date of sealing.

Dr. T. R. Govindachari: I think it would be inadequate. We have a drug with anti hypertensive activity which is being tested in the clinic. It seems to be promising in the preliminary trial. We have tried it for the last ten months on some 35 patients. We know the drug is well-tolerated when it is administered for a period of two or three weeks but, then, these anti-hypertension drugs have to be administered practically throughout man's life. So that, we cannot use or take for granted the results of short-term toxicity until we carry out extended studies for one year. This involves feeding the drugs to animals for a period of 6 months to one year or more to see whether it is safe for chronic use in human beings. We have not started such a chronic toxicity study yet. Even if we start the study tomorrow, it will be only one year later that we will be able to try it on an expanded scale in the clinic. Then we should gather data from a 1,000 patients which may take another three years. So, from the time of getting the patent it will take 7 years to introduce the drug in the market. Therefore, a ten year period is too short.

Shri Kashi Ram Gupta: You want 15 years from the date of application. We are giving ten years from the date of sealing of the patent. So, it will come to the same thing.

Dr. T. R. Govindachari: I have no experience as to how much time it takes after the first application to the date of sealing a patent, because we have started only three years ago.

Shri Kashi Ram Gupta: You say that we will be able to export our drugs. But up till now we have not produced even those drugs for which patents are originating in this country. So, how can we think of exporting at this stage?

Dr. T. R. Govindachari: We have filed our patents in 27 countries. If the drugs prove useful and successful, if they are superior or as good as existing drugs for particular ailments, there is every chance of their being exploited internationally. In that case, CIBA of India, which has made investments, will get royalties from those countries.

Shri K. K. Warrior: I would like to know whether the patent right gives you a monopoly of the market.

Dr. T. R. Govindachari: Yes, monopoly as far as that particular drug is concerned, for a period of ten years.

Shri K. K. Warrior: What kind of control would you like the Government to have so that the price charged by the company is reasonable to the consumers?

Dr. T. R. Govindachari: The pharmaceutical industry is a highly competitive industry. There are at least a dozen firms which are spending enormous amounts of money on research and which enforce the highest standards in the preparation of drugs. If our drug does not compare favourably with other drugs, there is absolutely no chance of its getting a market. We have always to make sure that our drug is as good as, if not better than, other drugs in the market. Also, we have to sell in a highly com-

petitive market. Suppose the price of our drug is ten times the price of another drug of almost the same quality and effectiveness, nobody will buy our drugs. So, the prices have to be realistic. At the same time, it has to be remembered that enormous sums of money which could have been paid as dividend to the shareholders are being ploughed into research. So, at least at a future date, the shareholders must get back that money. Further, I do not think anybody can afford to charge an excessive price. Then again, in the case of every important drug in the first two years they try to recoup the money that they have spent on research. Later on, the prices come tumbling down to 30 or 10 per cent of the original price. This has happened time and again. Also, there is always the danger of your being overrun by somebody else with another superior product.

Shri K. K. Warlor: It has come to our notice that some of the drugs patented in India are not produced here but actually imported into India as end product. The Indian price of those drugs is four times the international price. The international price of such drugs has been fixed after taking into account the money spent on research etc. The Indian consumer of such drug is precluded from getting them at the international price. What protection should the Indian consumer be given in such cases?

Dr. T. R. Govindachari: Naturally, I have no idea of the commercial aspect. But I could tell you that the prices in India are high because we do not have any organic chemical industry.

Shri K. K. Warlor: I am referring to imported products, not those things which are produced here. And they are imported from countries where the chemical industry is far advanced. They have the know how and they have recouped their expenditure on research. They are selling their products in India at four times the international prices.

Dr. T. R. Govindachari: I cannot tell you, because I have no idea.

Shri K. K. Warlor: We could also get those substances at those prices but, then, the patents come in the way.

Dr. T. R. Govindachari: I would answer this question this way. Suppose there is no patent. With the present state of affairs in India, when there is no organic chemical industry, is it conceivable or possible to produce drugs at a cheaper price? It is impossible, because we do not have a fine chemical industry on which the pharmaceutical industry can depend for its intermediates. Take benzene which is a primary starting material. It costs in India ten times the price obtaining in other countries. So also the prices of sulphuric acid, nitric acid and caustic soda. So, suppose you abrogate or abandon patents and start producing them yourself, you are not going to produce them at cheaper cost. I can assure you that. Secondly, the abrogation of patents will stop whatever incentive there is for research to come up in this country.

Shri K. K. Warlor: I was not referring to the import of raw material or intermediates but finished products which cost four times the international price in India because some companies have monopoly rights in them through patents. Could you suggest some way by which the Indian consumer will not be exploited?

Mr. Chairman: He is a scientist. He cannot speak on prices.

Dr. C. B. Singh: I am glad that you have laid stress on research. I am also glad that you appreciate that hardly any research is being carried out in India, either in the drug laboratories or in the Government institutions. What is the reason for lack of progress, so far as new drugs are concerned? Why is it that the Indian scientist has not been able to produce worthwhile results?

Dr. T. R. Govindachari: The main reason is that the scientific research in this country got impetus only after Independence. Before Independence, there was practically no interest in

research at all. Of course, the C.S.I.R. was started before Independence but it was just a very nominal thing. It is only after Independence that we have really made some progress. It takes time for a proper climate to be created. I feel hopeful that if you encourage research by encouraging private sector also along with public sector to set up research laboratories, we can still make good progress. We have the people and we have the ability. It is only a question of time before we can catch up. The more important thing is the question of organisation. It is not merely enough to have good people. You must be able to put them together and give them all the facilities without interfering too much. You must give them some amount of freedom. It takes time. In our country, the administrative outlook has been quite different so far because it has been striving to maintain the *status quo*, to keep things just going as they were.

Dr. C. B. Singh: You have used the word 'freedom'. I would like to know whether there is something which is interfering with your work.

Dr. T. R. Govindachari: For example, in my Institute, nobody tells us what to do and what not to do. We have taken up an assignment to produce drugs and all our ideas and all our efforts go into that. Nobody tells us, "Don't work on this problem or on that." We just do what we like. Nobody questions us whether we spent more on a particular thing. We have the freedom to spend as we like.

Dr. C. B. Singh: I agree on that. You know that more than 6000 Indian scientists are abroad and they are unwilling to return back to this country.

Dr. T. R. Govindachari: Yes.

Dr. C. B. Singh: Why is it so?

Dr. T. R. Govindachari: It is because we still do not have enough laboratories and enough research institutions in a country of our size and our population.

Dr. C. B. Singh: What about their emoluments and other facilities that the scientists get in this country?

Dr. T. R. Govindachari: There also, comparatively, they are much lower at present.

Dr. C. B. Singh: I thought you will say so in a direct manner. You don't reply in a direct manner. Their emoluments are poor. That is my impression also. Apart from that, is there anything else that is standing in the way?

Dr. T. R. Govindachari: Adequate research facilities are also not available.

Dr. C. B. Singh: Agreed. Suppose we create a cadre for our scientists. You know that a scientist can at the most become a senior Research Assistant or something like that. They go from pillar to post and they have no future. Every scientist cannot become a Director and has the highest powers and all the amenities. So, a really good scientist can at the most become a senior Research Assistant or a research worker in our national laboratories or in other departments. Is that correct?

Dr. T. R. Govindachari: That is true. Recently, the C.S.I.R. has initiated steps whereby at the end of five years, they are automatically promoted to the next higher cadre.

Dr. C. B. Singh: Exactly that is what I am coming to. So, you are in favour of having a cadre for the scientists.

Dr. T. R. Govindachari: Yes.

Dr. C. B. Singh: You have mentioned in your memorandum that this CIBA Research Centre is spending Rs. 50 lakhs. May I know what is the annual turn-over? I do not want to embarrass you. If you do not want to reply, you need not reply. Actually, I want to know what proportion of the turn-over, on an average, a pharmaceutical firm spends on research.

Dr. T. R. Govindachari: Honestly speaking, I have no idea.

Dr. C. B. Singh: All right. You being the head of the Department do not know how much is spent on research.

Dr. T. R. Govindachari: I know how much I spend.

Dr. C. B. Singh: According to you, what proportion of the total turn-over will be a reasonable amount for a pharmaceutical firm to spend on research?

Dr. T. R. Govindachari: It has been suggested by many experts that it should be about 10 per cent. That has been suggested all over the world. I think some pharmaceutical firms are spending much more in other countries. The other industries may not be spending that much. But pharmaceutical industries are entirely based on research. Some may be spending more than 10 percent.

Dr. C. B. Singh: You are only a scientist. So, I will not ask many questions.

Now, about the product patent or the process patent, there is a lot of controversy going on. We are at the moment concerned with the process patent. Do you think the process patent is not sufficiently effective?

Dr. T. R. Govindachari: I feel that is not effective.

Dr. C. B. Singh: Why? You are a scientist and you should give a scientific explanation.

Dr. T. R. Govindachari: When a particular research unit develops a new product, there may be 25 different ways of making this product and any intelligent group of people working on a particular product will certainly think of all the conceivable methods of making that particular product and cover it by a patent. Supposing somebody comes along and says that he has made it by an entirely new process, it is very difficult to check it whether it is true or not.

Dr. C. B. Singh: Supposing we stick to our ground of having a process patent, would you like to have any safeguard against that contingency which you have mentioned? Would you like us to incorporate a provision whereby the burden or proof will lie on the other person and not on the patentee? As the things stand now, the burden of proof lies on the patentee himself. Would you like to have a safeguard by which the burden of proof will lie on the other person proving that his process is entirely different?

Dr. T. R. Govindachari: That will be preferable. That will be a definite improvement. Actually, I do not feel very happy about the process patent.

Dr. C. B. Singh: That is all right.

Shri Dahyabhai V. Patel: I do not want to know any of your trade secrets. I would like to know from you only this. Since it is a well known fact that the Indian system of drugs and medicines is mainly confined to plants and mentals—the Ayurvedic science—are you conducting any research on some of the known specific Ayurvedic remedies?

Dr. T. R. Govindachari: We are doing a lot of research on Indian medicinal plants. During the last three years we have screened nearly 300 plants which are said to have medicinal value. Although we have not been able to show on experimental animals that they are effective—so far we have no encouraging results we have isolated several important compounds which have very interesting biological activity and which, if pursued in the next 5 or 10 years, may lead to something very new. So we are doing active work on the medicinal plants of India.

Shri Dahyabhai V. Patel: Are you not doing anything on the metallic side?

Dr. T. R. Govindachari: We are not doing anything on that side. We are doing just on medicinal plants.

Shri Dahyabhai V. Patel: You do not feel very much encouraged by what has been done so far? Is it in a stage where you are not able to say anything?

Dr. T. R. Govindachari: We have taken up several indigenous drugs, for which many claims have been made, for example, anti-diabetic drugs. But actually we have not been able to show on experimental animals that they are very effective. Still I would not say that all the work is a waste because we have been able to isolate many compounds which have very interesting biological activity and which may prove to be of great value; if pursued further.

Shri A. T. Sarma: According to Clause 53 of the Bill, the term of the patent for drugs and medicines will be ten years and for other inventions, fourteen years. In your Memorandum you have clearly stated that the time limit for patents provided in the Bill should be abandoned. But now you have tendered an evidence that ten years would be insufficient. Can you give clearly your idea about this?

Dr. T. R. Govindachari: The present patent law gives protection for 16 years.

Shri A. T. Sarma: My point is this. In the Memorandum you have suggested total abandonment of this Clause, i.e.,

“the proposed curtailment of the validity period of a patent be abandoned”.

Dr. T. R. Govindachari: Yes; that is my view.

Shri A. T. Sarma: But now you suggest that the period is not sufficient. There is a vast difference between these two. I want to have your clear idea about this.

Dr. T. R. Govindachari: The existing patent law gives protection for a period of 16 years which, I think, is a

reasonable period. The proposed patent law reduces it to ten years. I feel that it takes at least six to eight years to develop a new drug and the persons producing a drug will hardly have two or three years at the most to get anything out of their discovery and so, the period of ten years is very small.

Shri A. T. Sarma: Do you want 15 years?

Dr. T. R. Govindachari: I want the existing period of 16 years to continue.

Shri A. T. Sarma: Here these ten years and fourteen years have been calculated from the sealing of the drug. According to you, almost seven to eight years would be gone from the time of filing a patent to the successful introduction of a new drug, and so you have suggested 15 or 16 years. The Bill actually provides for ten plus seven years for drugs and medicines and fourteen plus seven years for the other inventions. So I think you will be satisfied with this provision.

Dr. T. R. Govindachari: The present Bill does not satisfy me.

Shri A. T. Sarma: You want 15 or 16 years from the date of filing whereas we have provided from the date of sealing.

Mr. Chairman: Mr. Kashi Ram Gupta has already asked that question and he has given an answer that ten years from the date of sealing would be sufficient.

Dr. T. R. Govindachari: What I feel is that it depends on the date of sealing. Suppose we file a patent this year and it is sealed in two years' time; that means, we do not get more than 12 years. So it depends on how long it takes to seal the patent.

Shri R. P. Sinha: I would like to know from the learned witness as to what kind of research is being carried on in his Institute. We are told that there are three types of researches—basic research, product development

research and formulation research. Are all these types of researches being carried on in your Institute or only one or two?

Dr. T. R. Govindachari: In our Institute, we are doing only basic research. We are not interested in product development or formulation at all. CIBA of India has a factory producing pharmaceuticals and there they do the product development, but we are concerned only with developing new drugs and we do not bother about processes for the existing drugs. All our efforts go into discovering new drugs.

Shri R. P. Sinha: I would also like to know from the learned witness whether there are other such institutes carrying on similar basic research on pharmaceuticals or CIBA is the only concern which is carrying on this type of basic research.

Dr. T. R. Govindachari: As far as the private sector is concerned, CIBA is the only place where research for the discovery of drugs is done. In the public sector, we have the Central Drug Research Institute, Lucknow, which has been working for the last 14 years, and where they are doing work on developing new drugs. The Regional Research Laboratory, Hyderabad, has also a small section working on discovery of drugs.

These are the only three institutions where some effort is made for doing basic research in pharmaceuticals.

Shri R. P. Sinha: Is there any liaison or close co-operation between your Institute and the Central Drug Research Institute and the Regional Research Station at Hyderabad?

Dr. T. R. Govindachari: We do not have any direct connection at all. But I was on the Executive Council of the Central Drug Research Institute for several years and I have visited the Regional Research Laboratory, Hyderabad, very frequently purely on a scientific basis for addressing meetings, working on selection committees and

things of that sort. But with day-to-day working there is no liaison because the research which we do or the research which those people do is kept confidential. As far as new developments are concerned, they or we would like to have the credit for making new discoveries; if it is widely known, then we lose all the credit.

Shri R. P. Sinha: Do you mean to say that it is the usual practice in foreign countries also that the different research institutes carry on their work in isolation, in secrecy, and they do not share their research development programmes?

Dr. T. R. Govindachari: Two types of work are carried out in all these institutions: first there is the basic research which may bring about new reactions and which is published widely in scientific literature; then there is the actual practical evolution of drugs on which some very useful information has been obtained and which may be of practical value and this is kept confidential till the time of introduction because it is a question of investment of money in research and people expect some return for all the money that they have spent; they do not want a competitor to steal their ideas and by using those, produce the thing a few years ahead of the original discoverer. It is a common practice in all such cases, where things which may be of practical value are concerned, to keep the information secret.

Shri R. P. Sinha: The witness has said just now that he was on the Research Committee of the Indian Drug Research Institute for several years. I would like to know as to what his experience is; what type of work is being done there, whether they have evolved any worthwhile drugs and taken out any patents?

Mr. Chairman: We are going there.

Shri R. P. Sinha: I would like to know his views, Sir.

Mr. Chairman: He is only on the Executive Committee. I do not know whether he can answer your question.

Dr. T. R. Govindachari: Actually the Executive Council has the task of making grants and sanction of expenditure and also going through the research programme. I think the CDRI scientists have also been quite active and doing good work in several fields, especially medicinal plants and also in fertility control. One thing really difficult in India is the translation of the laboratory results to actual clinical practice especially in this field; it requires a great deal of experience. To tell you frankly we ourselves are facing a great deal of difficulty in getting our drugs tested properly because in India the tradition of developing our own drugs is new. The drugs which have been introduced in India have all been tested thoroughly in other countries and only when they are absolutely sure of the results, they are handed over to the Indian dealers. Production of new drugs entails a lot of responsibility and enormous amount of time and money. Unfortunately, we have yet to develop that mentality in the clinical profession and try out our own drugs.

Shri R. P. Sinha: From what you have just now stated it appears to me that clinical testing in this country will take longer time than the clinical testing in advanced countries. Have I correctly understood you?

Dr. T. R. Govindachari: You are absolutely correct because it is a question of getting our clinical people to take interest. They are very very busy people, the top people. We cannot afford to have our drugs tested by ordinary physicians. We would like it to be done by the most competent people and generally the most competent people are also the busiest people in our country. You know our problems are much more and the number of obstacles is much more and the doctors are less in number and consequently there is greater pressure on them than on the doctors abroad. Clinical trials will actually be the biggest obstacles in developing new drugs. Recognizing this need, the CSIR has actually agreed to set up clinical trial

units in various parts of the country. They are prepared to give grants so that the best physicians, who are very busy people, may employ more assistance. Even in the research laboratories of CSIR they have this difficulty. In their research laboratories thousands of compounds are being prepared but they are inadequately tested. The first stage of developing a drug is screening in animals; for this purpose, a good sized animal house with facilities of breeding and maintaining colonies of different species of animals is necessary. Adequate facilities are lacking in this respect in the CSIR laboratories. After effective animal testing, come clinical trials. This is a bigger problem and the CSIR itself has realised that it is very difficult to get this done. So they have mooted the idea of having clinical units in various parts of the country. Actually one such unit has been set up in Bombay under Dr. U. K. Sheth at the KEM Hospital. Like that they are setting up other units also. So, clinical trials constitute a big stumbling block in producing the new drug. Therefore the delay in developing something new is going to be even more than what is normally estimated abroad.

Shri R. P. Sinha: Could you give us information as to how much time it takes after taking all factors into account and the difficulties also, for completion of the clinical research and the establishment of the drug clinically in this country and how much time it takes in other advanced countries, because this will have a direct bearing on the decision we will take on the period of patent?

Dr. T. R. Govindachari: The question is rather difficult to answer. So far not a single drug has been developed in India. We have only borrowed from other people and put it in the market. In other countries it takes a minimum of 6—8 years from the time of discovering the biological activity. I feel it will take at least 2 more years here. From my own

experience, we have a compound which is supposed to be a very good anti-hypertensive drug. For the last one year we have been able to get only 35 cases and now we are trying to get it tested more actively in several other centres. The physicians tell us that they would like to have a longer trial extending over a period of 6 months. That means that it will have to go back to the laboratory for chronic toxicity study in animals and it may take one more year to make absolutely sure that prolonged administration does not do any harm. Even after the results are ready, it will take another 1½ years. Then we go back to the physicians and say, 'Now the drug is safe. We will give you this drug. You will try it for this period.' This will take at least another 4 years if at all it survives all this critical and very very rigorous testing. We have only got 4-5 compounds which are worthy of going for clinical testing out of 4,000 substances we have made and tested in our laboratory. They say one in three thousand has the chance of becoming a drug. I hope at least one in 4,000 will come out.

Shri R. P. Sinha: I would like to know about this particular drug. I would like to understand the procedure so that I may apply my mind. When was a patent taken for this particular drug which you have referred to?

Dr. T. R. Govindachari: We have filed the patent application.

Shri R. P. Sinha: At what stage?

Dr. T. R. Govindachari: That is after almost one year of working in the laboratory and experimenting with animals. We have to do several elaborate tests. The first test is to try it on dogs. That is a routine test, for seeing whether there is a fall of blood pressure. Then you have to do toxicity tests: upto what dose is it safe? What is the lethal dose and what is the relationship between the lethal dose and the the-

rapeutically active dose? We have to do a very large number of experiments. All these will take at least a year before we can say that it is ready for clinical trial but the moment we knew that it is likely to be of value as a drug we applied for patent.

Shri R. P. Sinha: After you have applied for the patent, you say that the final specification with regard to this patent can be filed only after you have completed the clinical tests.

Dr. T. R. Govindachari: After the initial discovery of this compound we have to make at least 150-200 other compounds very closely related in structure so that we can pick out the best of the whole lot. This again means going back to the laboratory and making more and more compounds. That is a process which takes time. So at the time of filing the first application, we are given one year time to file the complete specification. In this period we have to do all this work, to try and make a number of compounds and have them tested quickly and pick out the best.

Shri R. P. Sinha: Within one year you have to file the complete specification and then you start the clinical test. Then only after you have satisfied about the clinical test results it takes, as you say 5 or 6 or 7 years and then you apply for the patent. Am I correct?

Dr. T. R. Govindachari: I do not know what exactly sealing of the patent means.

Shri R. P. Sinha: Grant of patent.

Shri K. V. Venkatachalam: The two things are different. Once an application goes to the Patent Office there is a separate system of procedure. They examine it to see whether there is any novelty and if the Patent office is satisfied that there is novelty they accept the patent application and then publish it for objection.

That is a completely different judicial process that will be going on. The applicant for his patents will be doing clinical tests independently. After it is published, if no opposition is there, then the patent is sealed. It may be within six months. Or on the other hand, if there is opposition, it may even take two years.

Shri R. P. Sinha: So, from the date of the filing of specifications you start the clinical tests and then it takes about five or six years. Does the Central Drug Research Institute also take the same time in regard to this clinical research? Have you got any idea?

Dr. T. R. Govindachari: I think they must be having the same difficulty as we are having.

Shri R. P. Sinha: I would like to seek one more information. In India we are spending a lot of money on research; the Central Drug Research Institute is there and now you have started your institute. In foreign countries, I find that every important drug industry has its own basic research institute. Now can you tell us whether any other important drug manufacturer is thinking in terms of putting up institutes like the one which you have under your control and what effect this Patent Bill will have on their plans for putting up research institutes in India?

Dr. T. R. Govindachari: I know that Hoechst has been thinking of starting such an institute; they have been coming to me regularly.

Mr. Chairman: But is there any institute like the one you have?

Dr. T. R. Govindachari: No.

Shri V. M. Chordia: In India, many of the products which are patented are produced by foreigners or in collaboration with foreigners. Indian patents are only nominal. If we ex-

tend the period of the patents, will not the benefit go more to the foreigners and less to the Indians?

Dr. T. R. Govindachari: The cost of production of pharmaceuticals in India is high not because of the patent law, but because the raw materials required are very much expensive—ten times more expensive—and, therefore, even by abolishing or limiting the patent period, you are not going to enable the Indian manufacturer to produce it at a much lower cost.

Shri V. M. Chordia: I have got a list of medicines here which shows that the initial marketing price was too high but the subsequent marketing price was very low. For example, take Vitamin B-12. The initial marketing price was Rs. 2,000 per gram and the subsequent marketing price was Rs. 40; the initial marketing price of Streptomycin was Rs. 19 per gram and the subsequent marketing price was Re. 1 per gram, and so on and so forth. How do you justify it?

Dr. T. R. Govindachari: It is very easy to answer this question. Take the Streptomycin case. In the initial stages, the process may be costly, but constant research goes into improving the process. For example, it is very well known that they now produce strains of micro organisms which yield more streptomycin by irradiation or with genetic changes. It takes a lot of time to develop new strains of these micro organisms capable of producing a better yield. It is not done all at once. In the initial stages they have something to go on and they introduce it. But they do not keep quiet. They go on improving the process. For example, the yield of penicillin in the initial stages was very low; but by discovering certain strains which are giving high yields of penicillin, the cost of production has been brought down. So only after a period of time, the cost of production can be brought down. It takes five years of

so from the point of discovering the usefulness of a drug to finding new ways of making it at a cheaper price.

Shri V. M. Chordia: Are you aware of the fact that many companies charge a lesser price in foreign countries but charge a higher price in India? For example, Tolbutamide (Hoechst) in many European countries is sold at \$1.85 for 50 tablets, while in India it is \$3.57 for 50 tablets. The price of Chlorpropamide (Pfizer) in Italy is \$1.41 for 60 tablets (250 milligrams), while in India it is sold at \$4 for 60 tablets (250 milligrams). There is a long list like this. How do you justify this?

Dr. T. R. Govindachari: Actually I am not competent to answer this question. I have no idea at all. But at the same time, my point is that by restricting the patent period, you are not going to improve the position. You are only going to destroy whatever incentive there is to put up an industry or to do research in this country. Unless the basic organic chemical industries are set up and intermediaries and primary starting materials are made available at international prices, it will never be possible to produce any drug at competitive prices in this country even if we abrogate the patents law.

Shri V. M. Chordia: My impression is that in India in spite of the old Act which permitted us to have a long period of patent, we could not invent new things and even if we have invented, they are only a nominal number of things. The new inventions are done mostly by foreigners. Now we are in a position to imitate them; then after imitating, we are in a position to improve them; and in the third stage, if we could learn something, we could invent new substances. Under these circumstances, will it not be better if we reduce the period of the patents? The foreigners' patents will lapse after ten years and after that, the Indian manufacturers with their own initiative can imitate their products

and sell in the market and thus save foreign exchange also.

Dr. T. R. Govindachari: Let me give the answer to this. At least 80 per cent of the drugs which are currently used are drugs on which patents have expired 25 or 30 years ago. None of these you are making in this country at a reasonable price. Take Aspirin for instance which is a very common thing. It has been known for hundred years. It is only recently, 5/6 years back, we have started manufacturing it in this country. For the Indian manufacturers, there is a vast field of drugs on which patents have expired 10, 20 or 30 years ago and no attempt is being made to make these at a reasonable price. If at all they produce they have to import foreign know-how set up a plant and the prices are finally not cheaper than what we being offered by foreigners. I do not think that merely abolishing patent will help, because nothing is being done with the products on which patents have expired long ago. More than 80 per cent are not being made in this country. Why pick out 20 per cent covered by existing patents and curtail the rights of the investors? This will take away incentive to people to invest money and discover something new. You are cutting down whatever incentive there is without benefiting anybody.

Mr. Chairman: Do you know that Dr. Dey in Calcutta of Martin Harris is manufacturing aspirin with an entirely new process and this is more popular and cheaper than the other product.

Dr. T. R. Govindachari: Actually in foreign countries, aspirin is made on an enormous scale, although different names are printed on the product. It is made by one manufacturer, probably Bayer or somebody....

Mr. Chairman: Have you seen the factory? He has fabricated a machine himself.

Dr. T. R. Govindachari: That is exactly the type of thing that ought to be done.

Mr. Chairman: Such people should be given encouragement.

Dr. T. R. Govindachari: Definitely.

Shri R. Ramanathan Chettiar: In reply to a question by a colleague of ours here, you said that it should be only product patent and not process patent. You did not enumerate the reasons for coming to this conclusion. Would you please enlighten us?

Mr. Chairman: He has given it. He has extensively given this. Two people asked about it—I think Warrior and Gupta.

Shri R. Ramanathan Chettiar: You have also remarked in the course of your observation that there has been no discovery in regard to any new product and no research has been done but may I ask you why steps are not being taken to find a remedy for common cold?

Dr. T. R. Govindachari: Common cold is a virus disease and actually we have very few drugs so far against viruses. Actually sometime in 1930, it was thought there was no cure possible for bacterial infections. Later on the sulpha drugs, phosphates etc. came in. Similarly for virus infection, at present there are practically no remedies except vaccination or immunisation, but I am sure with extended research some drug will be found. All the firms are having very active programmes in the anti-viral drugs field. We are also working on this. Influenza and small pox—on these two we are working very vigorously, testing all our products. If anything useful comes out, it will be a break-through in a field which has been considered to be impenetrable.

Shri R. Ramanathan Chettiar: In your Memorandum on pages 3 and 4, you have stated that a scientist's cost, on an average, is about 150,000 to 250,000 per year. It means only the remuneration or....

Dr. T. R. Govindachari: I just calculated roughly. In our place we have

25 scientists, senior people and it costs 52 lakhs to run the place. This is because a lot of other assistance is needed, expenditure on chemicals, services—water, electricity—and things like that. It is a very rough way of looking at it. If you want an effective group, it requires so much money to run a place. My figure is an approximation arrived at by dividing the total expenditure by the number of scientists.

Shri R. Ramanathan Chettiar: I want to know—you would know from your experience, you have worked in foreign countries as well—whether 10 per cent of the total turn-over of the industry should be set apart for the research. Is it being done in the foreign countries by the pharmaceutical industry? We had a gentleman from Switzerland the other day, who said it should be only 1 per cent.

Mr. Chairman: He said some are spending more.

Shri R. Ramanathan Chettiar: The Swiss expert who came here who is also connected with CIBA said specifically the other day 1 per cent. I mean how could any industry spend as much as 10 per cent.

Shri Kashi Ram Gupta: He said 3 per cent, not 1 per cent.

Official from Ministry: You see the Japanese figures. They are as much as 25 per cent.

Shri R. P. Sinha: In America it is 53 per cent of the turn-over.

Dr. T. R. Govindachari: Actually in pharmaceutical field, the industry spends the highest amount on research

Shri B. K. Das: You have mentioned that 4 per cent royalty would be very inadequate. You have not indicated what would be the proper adequate compensation. Could you give us an idea?

Dr. T. R. Govindachari: I do not think I can. I thought 4 per cent was too low. Really it is robbing somebody who has invested a lot of time and money.

Shri B. K. Das: You should give us an idea what would be adequate or at least near adequate compensation? What should be the basis of compensation? How it should be decided?

Dr. T. R. Govindachari: Actually I am not thinking on those lines at all. It is unfair to take away somebody's discovery and then give it away to somebody else who has not spent any time on it.

Shri B. K. Das: It comes to this that you are not at all in favour of compulsory licence.

Dr. T. R. Govindachari: Yes. I am not.

Mr. Chairman: You are in favour of product patent. A product may be manufactured by several processes. If we give product patent to one process, it will shut out research as regards the other processes.

Dr. T. R. Govindachari: It is always possible once you know that a particular product has a particular type of activity.

Mr. Chairman: You would be giving a monopoly to them.

Dr. T. R. Govindachari: After all the life line of a patent is not indefinite. It is for a period of 16 years at present.

Mr. Chairman: It may be even shorter. The life of a particular drug, with the scientific advance that is going on at a rapid pace, the utility of a drug, use of a drug may be limited to 5/6 years. If you give only product patents, it will be actually shutting out all discoveries or inventions for other processes.

Dr. T. R. Govindachari: My point is that a man who discovers a worth-

while product will think of all the theoretically possible ways of making that particular drug. He knows his subject. He will work out all the possible things in the laboratory. Other processes also will be covered.

Mr. Chairman: A doctor has given a suggestion that the burden of proof may be put on the infringer.

Dr. T. R. Govindachari: But it is a vexatious process to be all the time thinking of legal things.

Mr. Chairman: Take the case of Haffkins Institute. They invented a process altogether different from the old one. But they were frustrated by the foreign patentee and they were not able to manufacture, even though their process was new and the cost was nearly 1/4th of the foreign patent.

Dr. T. R. Govindachari: I submit, Sir, that you will have to examine these claims by such people rather carefully.

Mr. Chairman: Haffkins Institute is a very famous institute.

Dr. T. R. Govindachari: Sir, I submit that one must be very careful when claims are made that it is a cheaper process and all that.

Mr. Chairman: In the case of a research institute like the Haffkins Institute in Bombay, when it is a new method and a cheaper method, why should they be denied? Practically you are shutting out their discovery?

Dr. T. R. Govindachari: My point is that why should the person who makes the initial discovery be prevented from reaping the benefit of his discovery?

Mr. Chairman: Do you think that the return of the patent is more important than the health of the nation in a poor country like India?

Dr. T. R. Govindachari: I would not say it is so.

Mr. Chairman: If the health of the

nation requires that a product should be made through a cheaper process and in sufficient quantity, and a new scientist makes such a discovery, why should he be denied? Why should we give monopoly to the earlier patentee—the Indian or a foreigner?

Dr. T. R. Govindachari: Such cases are very rare.

Mr. Chairman: Why should it be shut out?

Dr. T. R. Govindachari: So that there may be some incentive for research.

Mr. Chairman: But that way you will be killing the incentive for research.

Dr. T. R. Govindachari: I am sorry I do not agree with you.

Mr. Chairman: You know some countries are thinking of restricting the patent period for drugs and articles of food. We are restricting it to ten years. Why should you object to it?

Dr. T. R. Govindachari: Because I explained to you.

Mr. Chairman : There is the other view also. You said that no other foreign firm has started research institute of basic industries.

Dr. T. R. Govindachari: When this patent law and all that came in, they hesitated.

Mr. Chairman: The main object of a patent is to engage in research and mainly within the country. All the foreign firms are importing intermediaries and selling them in India. Do you agree with that?

Dr. T. R. Govindachari: The thing is you must remember there is no fine

organic chemical industry in this country.

Mr. Chairman: The foreign patentees have not started research.

Dr. T. R. Govindachari: How can they start when in nine cases out of ten the starting materials are not available here, and there is difficulty in importing materials. Licences are there. We have to depend for all our fine chemicals on imports. Raw-materials are 5 to 10 times costlier here than in well-developed countries like Switzerland and Germany or England or USA. That is why people hesitate.

Shri K. V. Venkatachalam: Under the existing conditions, there is one school of thought that if you take away the patent system, the development will be quicker and more rapid. There is another school of thought that if you take it away, there will be a setback. What is your view?

Dr. T. R. Govindachari: I frankly think that if you take it away, the development expected to occur in the near future will not materialise.

Shri K. V. Venkatachalam: What is your assessment of the rate of progress of the pharmaceutical industry during the last 6 or 7 years?

Dr. T. R. Govindachari: There are administrative difficulties because nothing can be done without the concurrence of Government and it takes a long time to get any project through. Still, I think there has been considerable progress in the pharmaceutical industry. CIBA have put up a multipurpose plant 3 years ago which can make a whole host of pharmaceutical chemicals which were not being manufactured here before.

Shri K. V. Venkatachalam: If this Bill is passed, will CIBA's activities be affected in any way?

Dr. T. R. Govindachari: Yes. If other people start manufacturing the same things and selling them at cut-throat prices, naturally CIBA's profit will go down and correspondingly our research activities also will be affected.

Shri K. V. Venkatachalam: What is the exact relationship between your research centre and the main CIBA concern?

Dr. T. R. Govindachari: CIBA of India is an independent company with several divisions like the pharmaceutical division, pesticides division, etc. Ours is the research division and we do work on pharmaceuticals and dyestuffs.

Shri K. V. Venkatachalam: To what extent is your day-to-day activity directly related to any problems that CIBA may have in their pharmaceutical division or pesticides division, etc.?

Dr. T. R. Govindachari: Nothing at all. Our task is to develop new drugs and dyes.

Shri K. V. Venkatachalam: Is your annual programme approved by them?

Dr. T. R. Govindachari: There is no question of anybody approving or disapproving. We get funds from CIBA of India and we work and produce our results. As long as the Director enjoys their confidence, there is no question of approval or disapproval.

Dr. A. Joga Rao: From a study of the history of scientific development how is it possible to reconcile to your view that a single individual more or less possesses monopoly of all possible processes for a particular product? I shall cite three instances relating to the heavy chemical industry and the fine chemical industry. Among the heavy chemicals you are aware that caustic soda was being made using several kinds of cells. The devices and equipment and operations are different. So, there is a wide range of alternative techniques for achieving the same goal—caustic soda. Taking five

chemicals, hydrogen peroxide and ozone can be produced not by one method but by so many methods. It is not possible therefore to accept that all these methods must be conceived and thought of by the same individual apart from the fact as to whether that individual lays claims to them by means of patents or not. We cannot take for granted the omniscience, so to speak, of an individual or organisations in such matters.

Take the polyhydric alcohols like sorbitol and mannitol. They may have some uses in the pharmaceutical industry, but they are also used in the tobacco industry and other industries. Patents had been taken out and they had expired. Is it not possible for you to conceive of their production by alternative processes? The history of science does not seem to me to bear out that it is the same individual who always has the ability to think and exhaust all possible processes for achieving a particular goal.

Take the illumination devices. There are so many. If a broad patent is granted for light producing devices it will prevent others from developing different alternatives, the fluorescent tubelights for instance. So, a certain limitation is required to be imposed in granting patents.

You have experience of research in private concerns. You also have experience of fundamental and some applied research earlier in the Madras Presidency College. You have some knowledge of the researches and achievements of the CSIR laboratories also. Do you think there is anything which is wanting in these later laboratories and institutes which if supplied may contribute to their working on more productive and fruitful lines such as in CIBA, for instance? After all, the same men (i.e.) scientific workers go from these places to these and may be, *vice-versa*, and generally it is agreed that the men are all right.

You know that in the beginning, say in Dr. Bhatnagar's time, the CSIR

was taking as many patents as possible in its name.

Afterwards, probably in the light of past experience or, I do not know, for some reason, it seems there was a change in the attitude so as should not to encourage the filing of patents but publish everything instead freely. Do you think the latter policy has helped in the conduct of better i.e. more productive research in these public sector laboratories.

Dr. T. R. Govindachari: You gave a number of examples to show for the same product there can always be new processes forthcoming. But there is always a world of difference among different fields. In the pharmaceutical field, where you have a specific organic compound, any capable organic chemist will definitely think of all possible ways of making it, between the date of filing the first application to the filing of the complete specifications.

Shri K. V. Venkatachalam: You are limiting it to pharmaceutical preparations only?

Dr. T. R. Govindachari: Yes, I agree that in the matter of caustic soda there are new methods which can produce it at a cheaper price. Here, in the case of pharmaceuticals, the compound has a specific organic structure and the number of possible ways of making it is not unlimited. Any clever organic chemist can think of all the possible ways and it will be very difficult to pick a loophole. If you do not give a product patent but only a process patent, a competitor will make the product by some process which was already conceived of and claim it as a different method.

About the second point, it is all a question of emphasis and direction. In a private firm, people accept an assignment for a specific purpose and they try to do their best, whereas in a public laboratory the same amount of control is not there and people are allowed to do as they please. There is more of team work in a private laboratory.

Shri K. V. Venkatachalam: Why? It is due to the atmosphere or is it due to the psychological effect?

Dr. T. R. Govindachari: I do not know. My own experience is that there is more team work. Of course, some of the national laboratories are doing outstanding work. The people there are as qualified as the people we have. They have the same background, accomplishment and all that. But when we put them together I think there is less direction than what we have, and the orientation and the emphasis probably is not so much there. In our case, nobody tells us what to do. We are there with the task of producing drugs. Our first job is to discover something new which will be useful as a drug. We do not spend our time because it is not somebody telling us we should not do this or do that. It is a self-imposed discipline. We will work in a field which is likely to bring the quickest possible result. In a National Research Laboratory they work on something which may have long range benefits, which may be useful after 50 years, which may revolutionise the whole concept of science.

About the question of patents, I think the CSIR believes in taking patents. In the Food Research Institute, in the Leather Research Institute, people do take patents. In the matter of exploitation of patents the response has not been good and that may be the reason why there may be some slowing down.

Dr. A. Joga Rao: The CSIR was not stopping the taking of patents but they were trying to discourage it and as far as possible, except in very outstanding cases of inventions and of course invariably it had to be with the approval of the head of the department. As an alternative they thought publication of non-technical know-how would be more useful and anybody who was interested in a particular product or process was free to contact the CSIR directly and on

payment of some royalty or even freely they could get all the details about it. They seem to be of the view that that was the best way of developing indigenous industry.

About my first question, I am still not able to understand what you say. You say that in the pharmaceutical field it is possible to think of all possible permutations and combinations for a certain compound. If for an organic chemical compound, which is a very complex thing, it is possible to think of all possible combinations, it might be perhaps much easier in the case of a much simpler substance. Take for instance, cuprous oxide which is used in paints for the bottoms of ships. It is an antifouling ingredient. There are various grades. Chemically it may be

O. But from the point of view of its suitability for the purpose in view its fungicidal property and its stability to remain so without being oxidised etc., products from different sources may be differently. What you say amounts to this—that it should be possible here also and work out all possible ways of producing that substance which means that nobody else can produce the same substance, which is chemically the same and equally effective, by an alternative method. History does not bear that out; and current scientific literature constantly reveals many examples.

Dr. T. R. Govindachari: You are comparing entirely different fields which cannot be compared at all. In the pharmaceutical field a particular compound has a particular structure from the point of view of biological activity. Any organic chemist worth his salt will know what are the various reasonable ways of making that compound. He will take steps to see that all those steps are worked out and the cheapest and the most productive method is adopted. For somebody else to come along and say that he has found out a better method, the chances are one in a thousand.

Dr. A. Joga Rao: I can understand that a concern or body like yours will

always think of trying to make the claims as broad as possible on the scientific side, so that others may not tread on their foot. But we in the patent office would prefer to allow claims which are limited and well defined.

Dr. T. R. Govindachari: The chances of developing new methods are so remote.

Shri Kashi Ram Gupta: You have suggested a board of expert scientists to scrutinise the claims for compulsory licence. Should it be an advisory board?

Dr. T. R. Govindachari: Yes, that is the suggestion.

Mr. Chairman: Are your researches open for exploitation by the public in India or are they exclusively for CIBA?

Dr. T. R. Govindachari: They are exclusively for CIBA.

Mr. Chairman: Suppose somebody in India wants to apply for a compulsory licence. Could he do so?

Dr. T. R. Govindachari: I think the present law does not allow that.

Mr. Chairman: Are you responsible only to the Indian company or your parent company?

Dr. T. R. Govindachari: To CIBA of India.

Mr. Chairman: It is a world-wide organisation and it has come in for a lot of criticism by the Kefauver Committee of USA.

Dr. T. R. Govindachari: I know the general trend of the Kefauver Committee Report. But I have not seen the specific criticism of CIBA.

Shri R. Ramanathan Chettiar: The witness has answered his questions on the assumption that the sellers' Market will continue. The research that he is doing is also based on that assumption. Does he not envisage an

assumption. Does he not envisage a situation in the not distant future when there will be a buyers' market in which case he will have to face competition?

Dr. T. R. Govindachari: Definitely. That is all the more reason why we should have patent protection when we have a buyers' market. When we have spent a lot of money, when we discover something very effective we must have the opportunity of getting back what we have spent. Otherwise, no concern will spend any money on research.

(The witness then withdrew)

II. All India Drugs & Pharmaceuticals Manufacturers' Consultative Committee, Bombay.

Spokesmen:

1. Dr. Gurbax Singh, *Leader*.
2. Shri G. M. Parikh.
3. Shri R. Ganesan.
4. Shri B. S. Giri.

III. All India Manufacturers' Organisation, Bombay.

Spokesmen:

- | | |
|--|--|
| 1. Shri Hansraj Gupta, <i>Leader</i> . | |
| 2. Shri G. M. Parikh | } <i>Member of the Central Committee</i> |
| 3. Shri B. S. Giri | |
| 4. Shri R. Ganesan | |
| 5. Dr. Gurbax Singh | |

IV. Sarvashri G. M. Parikh, H. J. Vaidya and S. C. Nanabhai, Zandu Pharmaceutical Works Ltd., Bombay.

(The witnesses were called in and they took their seats.)

Mr. Chairman: The evidence that you give will be published and laid on the Table of the House. Even if you want a particular portion of your evidence to be treated as confidential, that will be supplied to the Members of the Committee. We have received

your Memorandum and that has been circulated to the Members. If you want to stress any particular point or make out any new point, you may do so. Afterwards, the Members will put some questions and you may answer them. I find that, by and large, you are in agreement with the provisions of the Bill and that there are very few points on which you differ.

Dr. Gurbax Singh: I have been asked to represent Dr. Basu here. Before I begin, I might mention that the All India Manufacturers' Organisation and ours are one and the same. We are representing manufacturers' interest only. If you have no objection, we may be heard together. That will be better and much easier. That will save the time of the Committee also.

Mr. Chairman: I have no objection. We can call them together. Mr. Parikh, do you want a separate hearing on behalf of the Zandu Pharmaceutical Works, Ltd., Bombay?

Shri G. M. Parikh: I leave it to you, Sir. I have no objection to be heard along with them.

Mr. Chairman: So, we can take up all the three groups together. The spokesmen representing all the three organisations, the All-India Drugs and Pharmaceuticals Manufacturers Consultative Committee, the All-India Manufacturers' Organisation and the Zandu Pharmaceutical Works Ltd. are here.

The evidence that you give is published and printed. It is distributed to all the Members of this Committee and also laid on the Table of the House and distributed to the Members of Parliament. Even if you want any particular portion to be kept confiden-

rial, it will be supplied to the Members of the Committee. Now, we have received your memoranda and they have been circulated to the Members. If you want to stress any particular point or make out any new point, you may do so. Afterwards, the Members will ask some questions and you may reply them.

Shri Hansraj Gupta: With your permission, Sir, at the outset, I must thank you for giving us this opportunity to appear before this Committee. We are also very happy that after all after a long waiting this Bill has come up. We have always been feeling that the old Indian patent law that has been prevailing uptill now has not been able to stimulate inventions and it has not been able to encourage the Indians to make more and more inventions. In any case, since we are concentrating on the various clauses of the Bill, I will point out only those clauses where we want certain amendments to be made.

With respect to clause 27, we would like that the applicant should be given an opportunity to show cause as to why his application should not be rejected. As the provision is, the Controller may refuse to give him the permission without consulting him on account of various reasons that might come to his notice. We think that that is not fair and that the applicant should be given an opportunity of having his say. After all, the Controller has got the right to reject the application. If the opportunity is given to the applicant, that will be better in the interest of all. What we are suggesting is that, in this case, the applicant should be given an opportunity to come forward and show cause why his application should not be rejected.

Clause 48 provides that patent rights shall not be deemed to be infringed when the patented article or the product made by the patented process is imported by or on behalf of the Government for the use of the Government and other organisations

working under the Government. This grants unlimited powers to the Government and also militates against the basic objectives which are behind the grant of a patent. We submit that this power should be given only where the patent has not been worked for producing sufficient quantities to meet the requirements of the country. Otherwise, it would not be very fair.

Clause 53 is in respect of the period for which the patent is to remain in force. Here you have given ten years in some cases and fourteen years in other cases. We submit that the period of ten years is quite sufficient and in case the man comes forward and gives valid reasons, the period may be extended to 14 years; otherwise, it should be 10 years. Formerly, as a matter of fact, the suggestion was that the period should only be 7 years, but you have been good enough to make it 10 years. It should be extended to 14 years only in very special cases.

Clause 64 is in respect of revocation of patents. Here I would like to refer you to the following:—

“Where the patent is for a process or for a product as made by a process described or claimed, the importation into India of the product made abroad by that process shall constitute knowledge or use in India of the invention on the date of the importation.”

Here we would like to point out that small quantities may be imported to carry out experiments and tests in this country and that should not be treated as knowledge having come into this country. So this should not affect a product thus imported for the purpose of tests or experiments only. Except for this small amendment or restriction, this Clause is perfectly alright.

Regarding Clause 82, the definition of “process” is not very clear. I submit that it is necessary that the word “process” be defined in this Clause so

as to restrict the patentee from registering all permutations and combinations or processes which were not experimented by him in his own laboratory; otherwise, he will cover the entire gamut of activity and make it impossible for any other person to carry on research. This is a case where we can very well define the process and limit it only to those processes which have been experimented upon by the patentee.

I now come to Clause 83. This lays down general principles, with which we are in full agreement. We very much welcome this Clause.

Similarly, Clause 84 is something which we want and which we welcome.

Clause 85 is regarding granting of compulsory licence. Here we submit that there is a possibility of cartelisation; all these people might come together and form themselves into a cartel and might particularly keep the prices up. So, while the matter is being gone into by the Controller, he should also see to it that there is no possibility of cartelisation. It is very difficult to know at the time when the application is made whether the people will form themselves into a cartel or not. But even so, probably some clause can be introduced which will make it impossible to form a cartel subsequently and the licence may be revoked in case it is found that cartelisation has been done.

Mr. Chairman: That is more in the province of Company Law.

Shri R. Ramanathan Chettiar: In other words, we do not want monopolies.

Shri Hansraj Gupta: Yes. The Controller should be in a position to take some steps. You can provide some clause for it in the Bill.

Mr. Chairman: That may be one of the reasons for revocation?

Shri Hansraj Gupta: Yes.

In respect of "licences of right", there is a little distinction which we have made in Clauses 86 and 87. For some of the products, the licences of right can be given after three years, but in the case of drugs and pharmaceuticals the licences of right will be granted as soon as the patent has been sealed. We submit that, in this case, the patentee does not get a full opportunity to exploit his patent. Therefore, so far as drugs and pharmaceuticals are concerned, a period of three years should be given as in the case of the other products.

Mr. Chairman: What is the time that you suggest?

Shri Hansraj Gupta: Three years, just as in Clause 86. Once you agree to that, necessary changes may have to be effected in various other clauses also. Drugs and pharmaceuticals also fall in the same line and three years' time should be given to the patentee here also; afterwards, it may be endorsed with "licences of right".

Shri R. Ramanathan Chettiar: So you agree with the period of three years.

Shri Hansraj Gupta: Yes.

In respect of Clause 88, you have suggested that the royalty should not exceed 4 per cent. On going through one of the memoranda given by the UPIA, I find that the average royalty which they have worked out is only 3.1 per cent. If that is so, we may put the royalty even as 3 per cent and I would not mind that. Of course, I agree to 4 per cent.

Shri R. Ramanathan Chettiar: That is the maximum.

Shri Hansraj Gupta: Yes; we quite agree to that.

Clause 90 spells out in detail the circumstances in which reasonable requirements of the public shall be deemed not to have been satisfied. We submit that, if the working of a patent in India is to be looked upon

as an essential obligation on the part of the patentee, the very fact that the patentee has not cared to manufacture in India the patented article should be sufficient to conclude that reasonable requirements of the public are not satisfied. Therefore, we suggest that the Clause be amended to read as follows:—

“If the patentee has not manufactured in India to an adequate extent and supply on reasonable terms for any justifiable reasons, the patented articles or a part of the patented articles which is necessary for its efficient working or if, by reason of the refusal of the patentee to grant a licence or licences on reasonable terms...”

So far as Clause 92 is concerned, it is quite alright. But at the same time we submit that the rules which have been formed under the old law are defective and new rules should be framed as early as possible and care should be taken that those defects do not come in.

Clause 93 spells out the power of the Controller in granting compulsory licences. In the original Act, the appeal was to the High Court of Calcutta. The appeal to the Central Government is likely to be governed by non-judicial considerations. We, therefore, submit that an independent tribunal may be appointed specifically for this purpose.

Shri R. Ramanathan Chettiar: Do you want an appeal to the Central Government or to a judicial court?

Shri Hansraj Gupta: We want the appeal to go to a judicial court. But, a special Tribunal might be appointed.

Shri R. Ramanathan Chettiar: You want the powers to be vested in the Central Government.

Shri Hansraj Gupta: Yes, Sir. We very much welcome clause 96. Similarly, we welcome clauses 97 and 98

too. In the case of clause 99, powers are given to the Central Government to use a patent or invention for the purposes of Government. We suggest that the Government should not be given such unrestricted powers to use the patent without due processes of law.

Shri R. Ramanathan Chettiar: In case of emergency?

Shri Hansraj Gupta: In case of emergency such as for defence, we have no objection to such powers being used by Government. We want, however, that the patentee must be given some protection.

Mr. Chairman: What is the protection that you want to be given to the patentee in such cases?

Shri Hansraj Gupta: We do not want any protection to be given in the case of emergency. In case of emergency, this clause is all right. In such cases, the usual processes of law might be followed. In other cases, you might give 4 per cent as royalty.

Mr. Chairman: In other words, do you want that some compensation should be given?

Shri Hansraj Gupta: The normal compensation which you have already provided for in the Bill might be given. The Controller should decide as to what compensation should be given.

In the case of defence, we don't mind. So far as compensation is concerned, it might be paid according to realisations that you have laid down already. But, this should not exceed 4 per cent.

Shri R. Ramanathan Chettiar: This 4 per cent is about royalty.

Mr. Chairman: Let him finish what he wants to say. You may then put questions to him.

Shri Hansraj Gupta: I am talking about the compensation to be given to

a patentee in case the Government is compulsorily using their patent. This might be decided upon by the Controller. It is possible that it might even be lower than 4 per cent. That should be done as per the regulations provided for here. The only point that we want to submit is that such a complete expropriation is not called for.

Dr. Gurbax Singh: I have nothing more to add.

Shri G. M. Parikh: I would like to add only one thing. As I have mentioned to the Study Group in Bombay, this Bill may kindly be passed as early as possible, before it lapses.

Mr. Chairman: We are all equally anxious.

Shri G. M. Parikh: That is the only point that I go on repeating.

Dr. C. B. Singh: You are representing three very important sections of the Industry. - May I know whether any of these groups which you represent have put in their patents anywhere as far as drugs are concerned?

Dr. Gurbax Singh: Unfortunately, we have not put in any patents anywhere. But certainly our products have brought down the prices very much.

Dr. C. B. Singh: That is a different question. Have you put any of your product with any patent?

Dr. Gurbax Singh: Not by ourselves.

Dr. C. B. Singh: The second question is this. What is the amount of money that you go on spending on research putting all of you together? We want a reply for this since you are representing three groups.

Shri G. M. Parikh: Every body is doing the research in his own way. Here the question is about the availability of raw materials like intermediaries and solvents for doing the re-

search. For example, for research, certain instruments are necessary. But, because of the import restrictions and foreign exchange difficulties, it could not be done.

Another thing is that since 1962 there is not enough scope for making any products because of ceiling of prices so that the industry can plough back its money for research. Another important thing is that if the Bill is amended and if the process is worked out, scope will be given to the Indian technologists to do the basic research. Unless and until something is done in this regard, the things which are already existing with the Indian industries cannot take them up. Even if the process of any drug is worked out, it is doubtful whether they would be able to exploit that.

Dr. C. B. Singh: You are not sure that you will be allowed to exploit the patent.

Shri G. M. Parikh: I would cite as an example Sulphadiazine and Talbutomide tablets. The State Government could not exploit the process and develop them still further as they were covered under patent laws. More than about 123 processes of Talbutomide have been registered under the present Patent Act. If anybody works out any process, he cannot come in because the process is already sealed under the Patent Act. Therefore, we have suggested in our memorandum that unless and until the process that has been worked out in the laboratory is developed further and put in the market as a product, it would be difficult to take advantage of by the people.

Dr. C. B. Singh: You are talking about a case which has been going on and which has not been decided. I am not concerned with that. I know that there are two famous cases; we are not concerned with that. My point is this. How much money you have been spending on research so far? I hope you will agree that only by research of many types of new phar-

maceutical drugs that you can develop new drugs and put them in the market. You have not given your answer as to how much money has been spent on research in this regard.

Dr. Gurbax Singh: The question of research to such an extent in the case of pharmaceutical industries will, I am afraid, take about ten years from now and not just now. I am making this statement because it is only since 1957 or so that these series of manufacturers of drugs have come up in this country. Prior to that, it all depended on imported drugs only. Unfortunately, all these years, everyone was preferring the medicines manufactured abroad. It is only since 1957 we have been manufacturing the drugs here. Whatever products that we have put in, the manufacturers alone can tell you as to how much money has been spent for propagating their trade marks and their drugs as compared to the foreign ones.

Coming to research, I must say that to-day Indian financiers or capitalists seem to be anxious about immediate profits rather than awaiting for profits. This is an unfortunate mentality. I am afraid that the manufacturers are hardly in a position to think of research at the moment to a large extent as in other countries. So, if I say that about Rs. 50,000 has been spent by my company alone, it is nothing as compared to crores of rupees that have been spent on research by foreigners. Foreign companies are more than a century old whereas we took up manufacturing of drugs only a few years ago. Prior to 1956, some of the people were dependent on the imported drugs. Some of the manufacturers have put up research laboratories here. So I would respectfully say to Dr. C. B. Singh that research work will be done only after some time, not just now.

Dr. C. B. Singh: It is so not only in the pharmaceutical field—because you have not put in the money there at all; you have only been getting the formula and propagating the drug. But

even in the national laboratories—that is the most unfortunate part of it—hardly anything has been done. That is what I am trying to put before you. What will you suggest so that this important activity of forming, formulating and finding out newer drugs by a particular process or by patented methods can be promoted? Could you suggest how this process can be helped because it is in our interests and it is in the national interest?

Dr. Gurbax Singh: I am extremely grateful to you for putting this suggestion before the Committee. I do feel that the Indian pharmaceutical industry badly needs that aspect of research. To my mind some good research work is being carried on in our national laboratories. But so far as the pharmaceutical manufacturers are concerned, I need hardly tell you that to-day the investor wants a return and dividend every year rather than thinking of research. The pharmaceutical industry in India is very much in its infancy. Of course there are people who have been in the field for 50 years or so, but they have not done anything at all in the field of research. They have been getting foreign research.

Dr. C. B. Singh: A lot of talk has been going on about the process and product patents; whether the process alone is to be patented or the product alone to be patented or process-cum-product to be patented. Our Bill provides for process alone. We have three alternatives. What will you suggest the best thing in the interests of our country?

Shri Hansraj Gupta: We have been suggesting that the processes which have been experimented upon by the patentee should be patented. Neither the product nor any other process through which he has not experimented himself should be patented.

Dr. C. B. Singh: That means the product by that process is not protected.

Shri Hansraj Gupta: Only the processes which he has experimented himself to be patented. Any other person can certainly manufacture that product through other processes. Then the patent is not going to militate against him. If he is using the same process which the patentee has patented, then of course he is barred. Otherwise, if the process is entirely different, he can certainly manufacture that product.

Dr. C. B. Singh: Evidence has come before us that Chemistry has advanced so far and is advancing so much that the difference in processes is almost thinning out day by day. The processes are more or less stereotyped and through these various processes you can by adding a molecule here or a molecule there bring out various products. In view of that will you lay stress entirely on process alone or will you combine the process and the product?

Shri Hansraj Gupta: In our opinion it should be only process.

Shri M. L. Jadhav: In the Bill a 10-year period is provided for certain products and a 14 year for certain other products. Would you like to have a 10 year term for all and secondly should it be from the date of application or from the date of sealing?

Dr. Gurbax Singh: It should be from the date of sealing.

Shri M. L. Jadhav: Will you think that when you say that our pharmaceutical industry have spent very little on research and if 10 years is the period, then in that case it is likely that India may be deprived of some good medicines because of non-availability of foreign interventions?

Dr. Gurbax Singh: In view of the present anti-biotics and other products which are already in the market, I have very little doubt if India will be starved of products of pharmaceutical line in case the 10 year period is kept.

Shri K. K. Warior: You said that you would like to have this ten year

period retained. I wish to know whether after the 10 years or at the expiry of 10 years if a new process is added to the original patent, you would require some more extension of the period?

Shri Hansraj Gupta: We do not want, but if a case is made out and the Controller is satisfied that a little more time should be given, then another 4 years may be given and that is the limit.

Shri K. K. Warior: In the pharmaceutical field we are told that about 90 per cent of the original patents have expired already and the Indian manufacturers are exploiting those now. How does this Patent Bill affect the remaining 10 per cent? What are the repercussions that will be on the remaining 10 per cent when the 90 per cent is left to you for exploitation?

Dr. Gurbax Singh: If I am not mistaken only the balance 10 per cent came as the latest products and it is the right time that we should be given an opportunity to use this 10 per cent.

Shri K. K. Warior: Unless and until our pharmaceutical industry can come of age should we not give some margin for these medicines or drugs to come here so that at least from the people's or consumer's point of view it will be advantageous.

Dr. Gurbax Singh: I will be grateful if some specific questions are put because it is a very general question. If you kindly ask about any particular product, I can answer.

Shri K. K. Warior: In the present stage of the pharmaceutical industry abroad they have more facilities; they have more equipment and all the intermediates and basic materials. All these advantages are there and if they come forward with life-saving drugs and if their products are patented here, do you want to exclude the Indian consumer and the Indian public from using that simply for keeping those products away by patent restrictions here?

Dr. Gurbax Singh: I am sorry I cannot answer this question as it is very vague. If you kindly specify any product, I will be able to give a definite answer. What are those products which you are aiming at? Our entire medical profession to-day is dependent upon a very few range of products—anti-biotics so many, then vitamins mean so many. I am afraid with the exception of...

Shri K. K. Warrior: We cannot say that. Inventions come all of a sudden. But the position is that the circumstances are such that they are in a better position and keeping in view the present stage of our industry, do you want to exclude the Indian consumer from the advantage of any new drug coming from outside which is a new invention?

Dr. Gurbax Singh: I may bring to the notice of my hon'ble friend that the import of many of the medicines is already banned. We are not permitted to import any medicine unless under very special circumstances and that too will be allowed only by the Drugs Controller. So far as drugs are concerned which will use that formulation practically everything which is not being manufactured basically in India is allowed to be imported and there is no question that it will harm public interest if the new patent is given.

Shri K. K. Warrior: How is it that the Indian prices of locally manufactured substances are much higher than the foreign prices, even taking into account the present circumstances of our development?

Dr. Gurbax Singh: Well, Sir, I am very glad that you have put this question. In fact I have myself pointed out that the pharmaceuticals or the basic materials that are being produced in India are much more costly than those produced by foreigners. I would say in this respect that again the

patents are coming in our way. Now let us take chloramphenicol, a general name for Chloromycetin. I am one of the pioneers in this field. In 1947-48 when originally Chloromycetin came into this country, 12 capsules to a patient would cost Rs. 65. Now the Italians don't have any trouble with patent law and they were selling at Rs. 28 for 12 capsules. The price in India was brought down from Rs. 65 to Rs. 35 in 1952; the American company was fined Rs. 9 lakhs when the first consignment came from a competitive firm in Italy. Later on, they went on reducing the price and now the price is Rs. 7.20 for wholesale and Rs. 9 for retail, whereas my company is today selling it at Rs. 3.75. The Government of India has granted import licence for the import of Gurcomycetin (Chloramphenicol) from America. The American price now for it is \$85 (about Rs. 640) for one kilogram whereas the same manufactured in Bombay costs Rs. 410 per kilo. But if it is imported from Italy, it will cost only Rs. 180 per kilo. So again the patent law comes in the way.

Shri K. K. Warrior: If I suggest that for the time being, let us not have any patent at all for the pharmaceuticals, what is your reaction?

Dr. Gurbax Singh: Well, I don't mind. That is what happened in Italy.

Shri A. T. Sarma: In your statement, you have stated that "the majority of the foreigners who have taken out patents in India never intended to manufacture their patented medicines in our country. These patents have been registered in this country to prevent Indian manufacturers from going into the production of these products." What remedy do you suggest for this?

Dr. Gurbax Singh: The new Act is the remedy. I might say for your information that the company which is

now offering chloramphenicol at \$ 85 took out a licence from the Government of India for its manufacture some 10 years ago. But even to-day they are not basically manufacturing the whole product here. If there are 19 processes for its manufacture, they start here from the 16th process or something like that.

Shri A. T. Sarma: It is said that India is lacking in technological development and technicians, and that if this Bill is passed, India may lose the assistance of foreign technology and technicians. Do you agree with that?

Dr. Gurbax Singh: I am afraid I can't agree with this. I have already stated that it will not affect our economy or health if the new Patent law comes into being and if some of the manufacturers, who are actually foreign manufacturers, come here and say otherwise, it is only for profiteering at the cost of the poor patient and nothing else.

Shri A. T. Sarma: We won't have any difficulty?

Dr. Gurbax Singh: Absolutely no difficulty.

Shri A. T. Sarma: India will be able to run its own industry without the assistance of the foreigners?

Dr. Gurbax Singh: Yes, but with the exception of those basic raw materials for which you have already permission to import. Majority of the manufacturers are already depending on the indigenous raw materials now. The import is only about 12 to 15 per cent of the raw materials.

Shri G. M. Parikh: Regarding technology and technical staff, on page 3 of the supplementary memorandum, they have stated that "the technology employed in research and the manufacturing processes are at present of

the same high standards as applied in advanced countries like U.K., U.S.A. and Japan." Now the only thing is that our technological staff should be given an opportunity to work so that when they get the facility to work, they will create among themselves a pool of workers in research and they will get research-minded. At present, they are only concerned with manufacturing and testing. To create research-mindedness in the technical staff requires certain training, and if they are to work on processes the industry must be sure that they are in a position to exploit whatever they produce in the laboratories. So the provisions regarding the licence of right and compulsory licensing will give sufficient opportunity to the technological staff to develop the processes and work and prepare themselves for basic research at a later date.

Shri A. T. Sarma: Some foreign witnesses stated that if the present Bill is passed, India's industrial activities will move backwards. Do you agree with it?

Dr. Gurbax Singh: No, we don't agree with it. In West Germany and Japan also, provisions for compulsory licences and licence of right are provided.

Shri Kashi Ram Gupta: Licence of right is not provided.

Shri A. T. Sarma: Do you carry any research work on Indian plants and if so, have you found any good results?

Dr. Gurbax Singh: I might only say that the foreigners have come and exploited our country, its plants and the scientific workers. We have not done it ourselves.

Shri R. P. Sinha: I would like to know if the hon'ble witness thinks that the research work has basic im-

portance for the development of technology and pharmaceutical production in this country or not. Do you attach importance to basic research?

Dr. Gurbax Singh: Yes, Sir. We do.

Shri R. P. Sinha: What should be done in order that we may develop basic research? What is your suggestion?

Dr. Gurbax Singh: I do not think, Sir, this is proper forum for me to say. Some Government help should be forthcoming for this.

Shri R. P. Sinha: Do you think that Government help alone will deliver the results?

Dr. Gurbax Singh: No. Government combined with private enterprise.

Shri R. P. Sinha: You have just stated that no worthwhile research is being done by the industry. It is a known fact also. Now you say you are not in a position to invest large amount of money in research work. Could you give us an idea what amount of money is required for carrying on basic research?

Dr. Gurbax Singh: I am afraid, we do not have any particular experience of that.

Shri R. P. Sinha: You have stated yourself that basic research is important. I agree with you. Now what should we do in order that we may encourage basic research. You have said let there be only copying work for the next 10 years. How do you reconcile these two statements of yours?

Dr. Gurbax Singh: Talking about this, Sir, even abroad—specifically the American people who are known to be on the top in the research work today in the pharmaceutical side—even in America, if you go into the details of their research method, you will find, one or two companies do the research and they sell out their

research to the other small manufacturers.

Shri R. P. Sinha: That we know. I am merely interested in asking have you applied your mind to this particular problem of developing basic research in this country?

Dr. Gurbax Singh: Yes, Sir. We have.

Shri R. P. Sinha: What is your suggestion? How could this Committee help the progress of this basic research in this country?

Mr. Chairman: I think he has already given the answer—Government help combined with private enterprise.

Dr. Gurbax Singh: Our major problem is that today investor needs a return immediately. We represent the investors. We have to look to their interests to begin with. What we feel is we must try to bring in products of foreign companies which are popular. Sir, I am making a clear statement. What happens to those products. They are again being copied by the international market—not by Indians only. This is the position in the world today.

Shri R. P. Sinha: Granting that, we would like to put you in such a position that you may make investment on research. For example, take the Jhandu Works. They are manufacturing all kinds of Ayurvedic and Unani medicines, but they are all the time copying the age old pharmacopoeia. We would like that some basic research should be carried out by the Jhandu Works. What should we do in order that you may find money to make investment on research work?

Shri G. M. Parikh: I would cite one example of Canada. The Government itself supplements the research programme in the private industry and whatever is spent by the industry, 50 per cent of that is given by the Canadian Government by way of grant plus on the balance of 50 per cent, the company gets rebate in income tax. At the same time on

other intermediaries and other equipment that are required to be imported and brought to this country for working these processes, testing these processes, a rebate on import duty and other facilities—all that is also given. If some sort of this type of assistance could be given, that would help.

Dr. C. B. Singh: They are being given by the Indian Government under the Indian income tax rebate etc.

Shri G. M. Parikh: Here the Canadian Government gives 50 per cent grant plus 50 per cent of whatever the company spends. Actually the industry spends 25 per cent. 75 per cent comes from the Government directly and 25 per cent is given by way of income-tax rebate.

Shri R. P. Sinha: So I understand. That is a good suggestion by you. We should encourage research by grant of subsidy from the State. I would like to seek another clarification from you. We have been talking about compulsory licences. The provision is already there in the present Act—forget about the Bill. The existing provisions in the Act give ample opportunity for you to make an application for compulsory licence to manufacture any patented product. Now I am told that much use of this provision has not been made. Could you tell me why you are not making use of the compulsory licensing system in order to bring forward patented products? What are your difficulties? What should be done in order that you may make better use of this provision. What is standing in your way to make use of this provision?

Shri Hansraj Gupta: I think the procedure under the present Act is very complicated. The procedure now laid down is very much simpler. I think under the new Act the compulsory licence provision will certainly help the people to come forward to place before the Controller that they are in a position to manufacture these articles. The Controller can go

through their applications and see whether they have got the capacity to do so and compel the patentee to give the licence. In the existing law, I do not think the procedure is convenient.

Shri R. Ganesan: The present Act is so comprehensive and ambiguous....

Shri R. P. Sinha: It cannot be both comprehensive and ambiguous.

Shri R. Ganesan: The Indian manufacturer who has to come forward to put the money for research, is always under the risk of being taken action against by the existing powerful group. So he is not in a position to take the risk. The Patent Act that is going to come into force makes a positive assurance for incentive and help. Then the Indian talent that is now available can come with the capital and can do much. Besides with the active collaboration of the national laboratories now in India plus the Indian talent that is available—I mean including both indigenous and the people who have got sufficient training in the modern sophisticated laboratories all over the world—the number is very large and everybody is interested now but sufficient opportunities are not given—active collaboration of the private industry on the one side and the Indian talent on the other and assistance of the laboratories and with the immense facilities that are now available—that will solve the basic point.

Shri R. P. Sinha: The two witnesses here have deposed one fact. The first learned witness said that because of the procedural difficulties in the existing Act, you could not take advantage of the compulsory licensing. Further you said now those difficulties have been removed in the present Bill and therefore you will be able to take advantage of the provision of compulsory licensing system now. I would like to know why is it that most of the drugs which have fallen out of the patent, whose patent life

has expired, are not being taken up to be manufactured by you? 800 drugs are being used for common use which have fallen out of patents. Why are their manufacture not being taken up by you.

Dr. Gurbax Singh: Quite a large number of these products have already been taken up.

Shri R. P. Sinha: Could you tell out of 800, how many are being manufactured?

Shri G. M. Parikh: Aspirin is being manufactured.....

Shri R. P. Sinha: I would like to have the number.

Dr. Gurbax Singh: We may not be able to answer that question just now. Quite a number of them have been taken up.

Shri R. P. Sinha: I am talking of 800 drugs commonly used.

Shri B. S. Giri: Over 100 drugs have already been taken in hand. The Development Council's statistics will give the number of items taken in hand.

Shri R. P. Sinha: One more question. We know that this compulsory licensing provision is available not only in our country but in other countries also. And we are told that these provisions of compulsory licensing, where the technology is quite advanced in other countries like England, are never taken advantage of. We are also told that the difficulty is to get the know-how. It is not only important to enjoy the patent process but it is also important to get the know-how to manufacture. Now, have you experienced this difficulty to get the know-how, and if so, how do you propose to get over that only by means of compulsory licensing provisions?

Dr. Gurbax Singh: This is the position in some of the foreign coun-

tries that I have visited. I discussed this question with some manufacturers. Our people are already specialising in certain types of projects. But we have to be extremely cautious in this line.

श्री विमलकुमार म० चौरडिया :
आप लोगों ने अभी बताया है कि अगर पेटेंट कानून को हटा दिया जाय, तो अच्छा होगा। आपने यह भी बताया कि हमारे पास खोज के लिये पर्याप्त धन नहीं है, उसकी वजह से खोज कार्य हो नहीं पाता। ऐसी स्थिति में शासकीय मदद के अलावा अगर कोई निर्माता खोज के लिये धन रखना चाहे, तो बिना उसको संरक्षण दिये, किस प्रकार खोज करेगा और उसके लिये आकर्षण क्या होगा, कि जिसके कारण वह खोज के लिये आकर्षित हो जब तक उसको अपने माल को, अपने प्राइक्ट्स को अपने भावों पर बेचने का अधिकार न हो, वह क्यों प्रयत्न करेगा ?

डा० गुरबक्ष सिंह : इस सवाल का जवाब मैं इस तरह से दे सकता हूँ कि जो कम्पनियाँ अपने माल का पेटेंट इस मुल्क में करा चुकी हैं, आप उनकी लिस्टों को ले लीजिये और इसके मुकाबले में यहां को और जितनी कम्पनियाँ हैं, आप उनकी लिस्टों को ले लीजिये अगर इनको आप देखेंगे तो यह पायेंगे कि 90 फीसदी दवाये ऐसी हैं, जिनको कापी की जा रही है, कम्पनियाँ एक दूसरे के रिसर्च को कापी कर रही हैं। वर्ना फौरन लोगों ने हमारे मुल्क में रिसर्च के नाम का ढोंग चार रखा है। आज हम लोग जो काम यहां पर कर रहे हैं, हम उनकी रिसर्च के बगैर चल रहे हैं और हमारी दवायें किसी भी तरह उनके माल से इन्फिरियर नहीं है और न ही कोई यह कह सकता है कि हमारी दवायें इतना फायदा नहीं करती, जितना फौरन दवायें करती हैं। इस लिये जहां तक रिसर्च का लाभ मिलने का ताल्लुक है, 5—10 साल के अन्दर

रिसर्च इतनी हो जायगी, कि हम खुद अपने पांवों पर खड़े हो सकेंगे।

श्री विमलकुमार म० चौरड़िया : आपने जो मेमोरेण्डम दिया है उसमें आपने सब बातों से सहमति प्रकट की है, लेकिन जहां तक कम्पलसरी लाइसेन्स का ताल्लुक है, उसके लिए कन्ट्रोलर ऐसी कौनसी बात अपने दिमाग में रखना चाहते हैं, जिनके लिये कम्पलसरी लाइसेन्स दिया जाय।

डा० गुरबुख सिंह : यह तर्जुबे की चीज है, जैसे जैसे तर्जुबा होता जायगा, रूज में अमेण्डमेंट होती रहेगी। इस वक्त पेटेंट ला पर बहस हो रही है, इस के बाद जिन जिन तबदीलियों की जरूरत होगी, वह इस में होती जायगी। इस वक्त तो इसका ऐसे ही बनने दिया जाय, रूज बाद में बनाये जा सकते हैं।

श्री विमलकुमार म० चौरड़िया : क्या विदेशी लोग अपने माल की ज्यादा कीमतें लगाकर मार्केट को एक्सप्लायेट करते हैं, इसको रोकने के लिए ऐसी कोई व्यवस्था की जाय जिससे इन्टरनेशनल मार्केट में उनकी प्राइसेज को कन्ट्रोल किया जा सके उनके एक्सप्लायटेशन को रोका जा सके और उनके द्वारा जो खोज की जा रही है उसको सही दामों पर उपलब्ध कराया जा सके ?

डा० गुरबुख सिंह : मुझे इस बारे में जापान का जाती तर्जुबा है। 1914 से 1921 की पहली लड़ाई में दवाइयां जापान जर्मनी से इम्पोर्ट करता था। इस लड़ाई के दौरान उनकी रिसर्च भी नहीं बढ़ी थी, सिर्फ कार्पींग चल रहा था, जैसा कि आज कल हम लोग कर रहे हैं। उसके बाद उन्होंने एक आर्डर निकाल दिया कि अस्पतालों में वे दवायें सिर्फ जापान की बनी हुई ही इस्तेमाल होंगी, दूसरी दवायें इस्तेमाल न करें। इस वक्त हिन्दुस्तान में

16 हजार अस्पताल हैं अगर इनके लिये भी इस तरह से फँसला हो जाय कि जो खास दवायें हिन्दुस्तान में बनती हैं, जिनके बनाने में हिन्दुस्तानी कैपिटल लगा है, हिन्दुस्तानी वर्कर्स हों, हिन्दुस्तानी मिलिक्यत हो, उनकी दवाओं को अगर आप मौका दें, 100 फी सदी न सही, 75 फी सदी दें, तो रिसर्च तो हम आटोमेटिकली शुरु कर देंगे।

इस वक्त क्या हो रहा है, मैं आपको एक मिसाल देता हूँ। क्लोरोमाईसिटीन को ले लीजिये। इसको ऑरिजनली पार्क डेविस ने बनाया। उनके दाम इस दवा के 1000 गोलियों के 700 रुपये हैं, जब कि हम लोग यही दवा 110 रु० में देते रहे हैं। जब उन्होंने देखा कि हम इतने कम दाम में दे रहे हैं तो उन्होंने क्या किया कि सरकारी अस्पतालों में इसके दाम 110 रु० कर दिये, लेकिन आम पब्लिक के अस्पतालों के लिये वही दाम रखे। अब आप अन्दाजा लगाइये कि 700 रु० और 110 रु० में कितना फर्क है जबकि माल में कोई फर्क नहीं है और फर्क हो भी नहीं सकता क्योंकि ड्रग एक्ट इतना स्ट्रिक्ट है कि उसमें सब-स्टैंडर्ड का सवाल ही पैदा नहीं होता। हिन्दुस्तान की फार्मास्यूटिकल कम्पनियों ने इस बात की कोशिश की है, कि उन दवाओं को कम से कम दाम पर यहाँ की जनता को दे सके। पिछले 6-7 सालों में इस तरफ काफी काम हुआ है।

Shri R. Ramanathan Chettiar: In their Memorandum they liked to know from the Controller the reasons why the patent was rejected. That is under clause 127.

Dr. Gurbux Singh: The point, Sir, is very small. The intention is that in this democratic country we should not give powers to just a single man.

Shri R. Ramanathan Chettiar: From the time you file an application, with

the Controller till the time the Controller takes a decision on your application, there will be a time-lag, and then naturally you will know the reasons which impelled the Controller to come to a conclusion? Is it necessary for the Controller to give you the reasons?

Dr. Gurbax Singh: In order to avoid complications at a later stage and get the blame for one thing or the other, there is no harm if the Controller gives something in writing to the applicant.

Shri R. Ramanathan Chettiar: Do you envisage the possibility that in your judgment the Controller may err in which case you would like to go in appeal?

Dr. Gurbax Singh: That is exactly what we mean by this. It is better that the Controller himself may give the reasons first so that lot of time can be cut short in the subsequent stages.

Shri R. Ramanathan Chettiar: In the normal process your viewpoint can always be put before the Controller and he can review the position himself.

Dr. Gurbax Singh: That is exactly what we have meant by this. Instead of rejecting straightway, let him give the reasons so that an opportunity is given to him to explain his conduct. He can have in his file the fact that the reasons were sent to the applicant.

Shri R. Ramanathan Chettiar: From the replies you have given to my honourable colleagues I find that you are representing the distributing trade.

Dr. Gurbax Singh: No. We are all manufacturers. I am the President of Gurco Pharma Private Ltd.

Shri R. Ramanathan Chettiar: I think your colleague Mr. Hansraj Gupta was confusing the question of royalty with the question of payment of compensation. You would expect compensation from Government if

they take up manufacture in an emergency. Royalty is different from compensation. Compensation is not provided even in the present Bill.

Shri Hansraj Gupta: We want that this man should be able to get some compensation. We thought that the royalty was sufficient compensation...

Shri R. Ramanathan Chettiar: Only in percentage.

Shri Hansraj Gupta: Yes.

Shri R. Ramanathan Chettiar: Compensation should be the royalty percentage. Otherwise compensation is not provided in the Bill.

Shri B. K. Das: You have suggested that there should be definition of the term 'process' so that there might be one process for a single product. I think if you accept the dictionary meaning of the term, then probably you need not have any definition for that. Are you agreeable to this?

Dr. Gurbax Singh: Actually 'process' should be defined clearly in the Act so that there is no confusion about it.

Shri B. K. Das: Suppose it is mentioned in the Bill that you want one process only to be patented....

Shri Hansraj Gupta: One or more processes provided all of them are experimented upon by the patentee. If it is not experimented, then under the definition that process will not be covered.

Shri B. S. Giri: What we mean is this: A process which has been carried out in his laboratory by the applicant. We want that sort of definition.

Shri B. K. Das: He will say that he has been successful in producing a certain drug and he wants patent for all the processes. It may be that he will exploit only one process.

Shri B. S. Giri: For example, in Chemistry we have so many processes before you arrive at the final product. For instance, nitration will be done by various means. Mixing is a process. What we mean by process is something which he has carried out in his laboratory. If he has experimented with two processes, let him have two. If he has experimented with three, let him have three; but not processes which he has not experimented.

Shri K. K. Warrior: Is there any method to find out that he has experimented it in his laboratory?

Dr. Gurbax Singh: We have a complete protocol for that in every laboratory. The Controller can examine that. Ultimately there is no objection to accept the dictionary meaning.

Mr. Chairman: When a particular phrase has no definition, the practice is to accept the dictionary meaning.

Shri B. K. Das: Then you wanted clause 87 to be deleted. But you should know that this is one of the important clauses in our Bill. This Bill has tried to put drugs, medicines and food on a different footing so that our people in India will have better advantage of exploiting them. If only clause 86 is there, do you think that all the safeguards provided in 87 will be available to them? Will they not be prevented from exploiting them?

Shri Hansraj Gupta: There was discussion on this very point in our organisation. A number of people were of your opinion. But the general consensus was that the patentee should be given three years as in the case of other articles. It is quite correct that there was a difference of opinion in our organisation on this point.

Shri Shyamnandan Mishra: I have two problems in my mind. One is that if the patent manufacturers

deliberately keep the manufacture at a low level and because the economy of the scale is not available the prices of such products are kept artificially very-high, what remedy would you suggest? Would you suggest that it must be binding upon the patent manufacturers to keep to a particular scale of operation, that is the optimum level?

Shri Hansraj Gupta: We thought that the Controller will go into that matter whether he has been carrying on manufacture according to the public requirements.

Shri Shyamnandan Mishra: My question is simple economics. Economy of the scale should be available to him if the product is to be cheap. If a particular manufacturer deliberately keeps the scale very low and therefore artificially keeps up the price very high, should it not be laid down in the beginning that he must conform to a particular minimum?

Shri Hansraj Gupta: After all the drugs may be manufactured. But to that extent they may not be used by the public. In case you compel him to manufacture, he may manufacture; but he cannot sell them. Therefore, these two things have got to be adjusted. A little time may be given to him. If the demand is there, and still if he is producing at a low level, the Controller can take action against him.

Shri Shyamnandan Mishra: Should there be a provision in law that there should be a minimal requirement of scale of manufacture on the basis of known demand?

Shri G. M. Parikh: There is sufficient provision already. If the manufacturer is not meeting the country's requirement, the Controller can revoke the licence and give it to other people. Or, Government themselves can take up the manufacture.

Shri Shyamnandan Mishra: There is a certain nuance of difference I am

trying to make. It may well nigh be impossible for a particular manufacturer to meet the demands of the community entirely. But should it not be insisted upon that a particular unit conforms to the minimal requirement?

Shri Hansraj Gupta: Where the demand is already there he must be asked to put up an economic unit. We can make a suitable amendment to that effect.

Shri Kashi Ram Gupta: How is it possible to assess the demand when the patent is granted?

Mr. Chairman: How can you lay down that condition when the patent is granted? It is not practicable.

Shri Shyamnandan Mishra: If the actual known demand of the community is X and if the production on the basis of the patent is going to be X—Y, should it not be laid down clearly that the remaining unfulfilled demand could be met by import?

Shri Hansraj Gupta: Apparently there is nothing against it. I only suggest that in the first instance, the quantity Y should be allowed to be manufactured here itself by means of a compulsory licence or licence of right.

Sardar Daljit Singh: In your memorandum you have said that the majority of foreigners who have taken out patents did not manufacture their patented products in this country. What is the number of such patents registered in India?

Dr. Gurbax Singh: It may not be possible to give the exact number. But I can give some examples. The total requirements of the country of chlorophenecol according to Government publications is 50 tons per year. The licensed capacity already is more than 52 tons, but the manufacture is hardly 10 tons, that too not at the basic stage, but from the intermediate

stage. Other examples are tetracycline, hydrochloride, vitamin C, etc.

Shri Kashi Ram Gupta: Other than pharmaceuticals, what other industries are represented by you, which hold patents?

Shri Hansraj Gupta: Radio, textiles transistors, etc. There are several industries.

Shri Kashi Ram Gupta: You say that the period of patents may be reduced to 10 years in all cases. Is it the view of the manufacturers as a whole?

Shri Hansraj Gupta: Yes.

Shri Kashi Ram Gupta: But not a single manufacturer has given evidence before us like that. This is the first time I hear it.

Shri Hansraj Gupta: When we are asking for 10 years, we are taking into account the interests of other industries and the interest of the consumers also.

Mr. Chairman: Are other industries represented in your organisation? Have you taken their view also into consideration?

Shri Hansraj Gupta: Yes. We considered it in our committee. Most of the other manufacturers also are represented there.

Shri Kashi Ram Gupta: Do you know that FICCI and CSIR have got different views on this? They want to stick to 16 years, for items other than drugs.

Shri Hansraj Gupta: If the Controller is satisfied that 10 years are not sufficient, then 14 years may be given. We do not mind it.

Shri Kashi Ram Gupta: That means 4 years will be the renewal period.

Mr. Chairman: They do not mind if it is 14 years for other industries.

Shri Kashi Ram Gupta: I have stated the opinion of CSIR and other technical people.

Shri Hansraj Gupta: We do not know about that.

Shri Kashi Ram Gupta: Dr. Gurbax Singh said that we may be able to take to research in ten years. May I know his idea about a unit of pharmaceutical industry which can have a research wing of its own?

Dr. Gurbax Singh: I can talk about my own firm which has its office in Delhi to which a visit from the hon. Members of this Committee is always welcome. We have about eight specialists who are working only on research. We are spending about Rs. 50,000 a year at present. We have 4 M. pharm., 3 B. pharm and one B.Sc. who are placed under the charge of one medical man working only on research. While we are developing new products we are trying to deviate from the conventional products that are coming from foreign countries. I must make a statement that it is very uneconomical. The moment we go to the medical profession, they say that they want time before they change over from the previous conventional products. Therefore, our own research people say that they will take over new products a little later and they will continue to manufacture the conventional products. That is the state of affairs with a majority of manufacturers. As I said, I would welcome a visit from the Members to our firm. We are doing research on vitamins and also on herbs. We have not finalised anything excepting those conventional products which we are doing. For instance, combination of anti-biotics was in a very very ambiguous state and the foreign companies were telling that it was impossible for any Indian company to do that. Fortunately, my firm has been the first to do it and do it successfully. Chloremphenicol was never available from any corner in a ready-made injection form. It was available either in a powder form to be mixed with water or in some other

way. My company was the first to produce it in an injectible form and we have been using it since 1955.

Shri Kashi Ram Gupta: You are doing research on products and not basic research?

Dr. Gurbax Singh: We are doing product research.

Shri Kashi Ram Gupta: What would be the minimum requirement of a unit doing basic research? What will be the yearly expenditure?

Dr. Gurbax Singh: About Rs. 4 lakhs to Rs. 5 lakhs a year and in about five or six years they can be very successful.

Shri Kashi Ram Gupta: CIBA has a research institute in Bombay. They say they are spending Rs. 50 lakhs a year, they have 25 senior scientists and so on. Are you of the opinion that such a large research unit is required?

Dr. Gurbax Singh: I do not think so. It is very difficult to criticise anybody. I would request this committee to go into the details of their expenditure and then they will see the real position. It may be that to avoid income-tax they show huge expenditure under this head.

Shri Kashi Ram Gupta: There are experts who have said that it takes several years to finalise the clinical research. Are you of the same opinion?

Dr. Gurbax Singh: No. I can say that when we started manufacturing the basic injectible product of Chloremphenicol we first gave it to Safdarjung Hospital and, I remember, they took six months to give a confirmative report and after that we issued the product. Unless hospitals refuse to cooperate with the manufacturers, it should not take more than a year or two.

Shri Kashi Ram Gupta: Are clinical facilities the same here as in the European countries?

Dr. Gurbax Singh: Our doctors are reluctant to try new products on their patients. Therefore, what we do is, we try the medicines first on animals, which takes about six months, and then we give them to the hospitals who take another six months.

Shri Kashi Ram Gupta: You have said that you require a period of ten years. Is it from the date of sealing of the patent?

Dr. Gurbax Singh: Yes.

Shri Kashi Ram Gupta: There are also a number of model laws for developing countries. They also say that ten years is the minimum period. But seeing to the conditions of our country, do you think a ten year period is sufficient?

Dr. Gurbax Singh: Ten years would be the maximum.

Shri Kashi Ram Gupta: It means if this Bill is passed we will be able to have easy access to compulsory licensing?

Dr. Gurbax Singh: I should think so.

Shri Kashi Ram Gupta: Then we will be able to force foreign patentees to either start manufacturing in this country very soon or give compulsory licence.

Dr. Gurbax Singh: Yes.

Shri Kashi Ram Gupta: What about our local people, Indian firms who want to have research? Will this period be enough?

Dr. Gurbax Singh: Yes.

Shri Kashi Ram Gupta: In your memorandum you have said nothing about clause 66.

Dr. Gurbax Singh: That means we agree with it fully.

Shri Kashi Ram Gupta: Can you give some statistical data to elaborate this point to show that it is not correct that if this Bill is passed it will discourage foreign investment in this country?

Dr. Gurbax Singh: Here we are discussing the pros and cons for the betterment of our own community and not how much benefit should be given to the foreign manufacturers. On the contrary, I would be the first man to say that even if we stop foreign manufacturers nobody in this country will die for want of medicines. I can supply the required statistics if necessary. So far as price structure is concerned, besides help, we have to see how many people in the country are dying without medicines because they cannot afford them. Looking into that, at least our motto is to produce products at the minimum possible price so that the poor patients can obtain them. While that is our main motto as representatives of the industry here, the motto of the foreign manufacturers is quite different. We have got some statistics of prices which will prove that. For instance, TB is a bad disease in India and the price of one product manufactured locally is Rs. 30 whereas the price of the imported material is Rs. 12. This is due to the operation of the patent law. For another drug the local price is Rs. 31 while the imported price is Rs. 7. For a third drug the indigenous price is Rs. 90 while the imported price is Rs. 25. These are all unpatented drugs. You can see the difference. Once the new Patent law comes into force, the local prices are bound to come down.

Shri K. V. Venkatachalam: If, as you say, these are all unpatented drugs, how will the prices be affected by the passing of the new patent law.

Shri G. M. Parikh: Our high prices are due to the cost of intermediates which have to be imported.

Shri Kashi Ram Gupta: Do you think that foreign collaboration is needed or not for the next ten years?

Dr. Gurbax Singh: It is a matter of opinion. Personally speaking, I have done it without foreign collaboration so far.

Shri Kashi Ram Gupta: I am asking for the country as a whole. Do you

think that we can do away with foreign collaboration immediately?

Dr. Gurbax Singh: A lot of fuss is made about it. Even the Finance Ministry would give permission only if we have foreign collaboration. There is a sort of mania for it in our country, including in the pharmaceutical industry.

Shri Kashi Ram Gupta: I want the opinion of your organisation.

Dr. Gurbax Singh: In Bengal 99 per cent of the companies are operating without foreign collaboration. In Bombay people are after foreign collaboration. In my own organisation, I have no foreign collaboration.

Shri Kashi Ram Gupta: What is the view of Shri Hansraj Gupta?

Shri Hansraj Gupta: We have always considered that foreign collaboration may be allowed to a certain extent. After all, we have nothing against foreign collaboration. It is a matter of convenience and judgment also. We must not put a ban on foreign collaboration on ideological grounds.

Shri R. P. Sinha: Would you like to have the inflow of foreign capital and foreign technical know-how or not?

Shri Hansraj Gupta: We would certainly welcome it.

Mr. Chairman: Thank you.

(The witnesses then withdrew).

(The Committee then adjourned)

Minutes of Evidence given before the Joint Committee on the Patents Bill, 1965

Tuesday, the 12th July, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman.

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri P. C. Borooah.
4. Sardar Daljit Singh.
5. Shri Basanta Kumar Das.
6. Shri V. B. Gandhi.
7. Shri Kashi Ram Gupta.
8. Shri Madhavrao Laxmanrao Jadhav.
9. Shri Mathew Maniyangadan.
10. Shri Braj Behari Mehrotra.
11. Shri Bibudhendra Mishra.
12. Shri Chhotubhai M. Patel.
13. Shri Naval Prabhakar.
14. Shri R. Ramanathan Chettiar.
15. Shri A. T. Sarma.
16. Dr. C. B. Singh.
17. Shri K. K. Warior.
18. Shri Balkrishna Wasnik.

Rajya Sabha

19. Shri Arjun Arora.
20. Shri Vima'kumar M. Chordia.
21. Shri Shyamnandan Mishra.
22. Shri Dahyabhai V. Patel.
23. Shri Mulka Govinda Reddy.
24. Shri M. R. Shervani.
25. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.

3. Shri A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMAN

Shri R. S. V. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Indian Chamber of Commerce, Calcutta.

Spokesmen:

1. Shri B. P. Khaitan.
2. Shri B. Kalyanasundaram.

II. Associated Chambers of Commerce and Industry of India, Calcutta.

Spokesmen:

1. Mr. C. A. Pitts.
2. Mr. A. B. Parakh.
3. Mr. I. Mackinnon.

III. Bengal Chemists and Druggists Association, Calcutta.

Spokesmen:

1. Shri P. K. Guha.
2. Shri T. K. Ghosh.

I. Indian Chamber of Commerce,
Calcutta

Spokesmen:

1. Shri B. P. Khaitan:
2. Shri B. Kalyanasundaram:

(The witnesses were called in and they took their seats)

Mr. Chairman: The evidence you give is public and will be published and laid on the Table of the House. Even if you desire any part of it to be confidential, that also is liable to be distributed to Members of Parliament. We have received your memorandum which has been circulated to all the members. If you want to stress any particular point or add any new point,

you may do so. Afterwards, members will ask questions.

Shri B. P. Khaitan: We are fully in agreement with the objects and purposes of the Bill. We would like to emphasise only one or two points. One is about the tenure of patents. The Bill provides that it shall be 10 years. You know after a patent has been registered it takes 4 or 5 years before any practical use can be made of it. So, having regard to the expenses and costs involved in working out a patent, setting up a factory, etc., 10 years is too short a period. So, we suggest that the tenure provided under the existing Act should not be reduced. We understand the question of tenure has been considered under the auspices of the UN and they have also recommended

a period of 20 years. This may be considered.

There is a provision for compulsory acquisition of patents by the Government, Government corporations or any person authorised by the Government, but the objects and purposes for which this compulsory acquisition will be made, like famine or defence, etc. have not been specified. This may alarm patent-holders and outsiders registering patents here. So, those objects and purposes should be laid down in the Bill itself.

Where royalty has not been agreed upon, the Bill provides a maximum royalty of 4 per cent. This may not be adequate. Therefore, the maximum limit should be raised.

Shri Kashi Ram Gupta: How many manufacturers of pharmaceutical drugs are members of your Chamber?

Shri B. P. Khaitan: About 50 to 60.

Shri Kashi Ram Gupta: The model law itself provides on page 49 in its commentary that a patent can be granted for a minimum period of 10 years from the date of grant of the patent. This is the commentary on section 25.

Shri B. P. Khaitan: We were informed that it is 20 years. We stand corrected.

Shri Kashi Ram Gupta: The main reason given for demanding a longer period for the pharmaceutical industry is that they have to spend on research. But in India, the industry is not spending anything on research. In view of this, is it not desirable in the interest of the consumers that the period should be minimum?

Shri B. P. Khaitan: If there is no research, there will be no patents. If there is research, there will be expenditure. If you do not give a longer period, the incentive for research will not be there.

Shri Kashi Ram Gupta: Is there any research undertaken in the Calcutta region?

Shri B. P. Khaitan: Attempts are being made. People are now thinking in terms of undertaking research. There is a change of outlook in the industry. That is a well-known fact.

Shri Kashi Ram Gupta: Can you name any research institute in Calcutta.

Shri B. P. Khaitan: Many institutions have been set up. But actual research in the proper sense of the term is not there.

Shri Kashi Ram Gupta: Your Chamber represents both the pharmaceutical manufacturers and also the other industries' manufacturers?

Shri B. P. Khaitan: Our Association is composite representing manufacturers, consumers, traders and industrialists.

Shri Kashi Ram Gupta: In view of that, may I know whether the manufacturers of other industries have also demanded any amendment to be made in this Bill so far as the period is concerned?

Shri B. P. Khaitan: Our Memorandum has been drafted by the committee which is representative of all interests.

Shri Kashi Ram Gupta: So, the 14 years period from the date of completion of specifications is agreeable to you. My point is this. The existing Act provides 16 years period from the date of application and this Bill provides 14 years period from the date of completion of specifications. So, that does not make much difference. Do you agree with it or not?

Shri B. P. Khaitan: We have mentioned in our Memorandum that the period of 16 years should not be reduced.

Shri Kashi Ram Gupta: The period of 14 years is from the date of completion of specifications. Normally, it takes 1 to 1½ years to complete specifications. The period of 16 years is from the date of application. There is not much difference between the two. I want to know whether you are agreeable to that aspect.

Shri B. P. Khaitan: It makes no difference in that case.

Shri K. K. Warrior: I wish to know whether you have ascertained the views of the members of your Association representing pharmaceutical industry in particular separately.

Shri B. P. Khaitan: They are appearing separately before you. They have sent a separate memorandum.

Shri K. K. Warrior: I want to know whether you have ascertained their views.

Shri B. P. Khaitan: We have not done it.

Shri K. K. Warrior: May I know whether the Chamber is representing foreign interests also? Have you any foreign members?

Shri B. P. Khaitan: No.

Shri K. K. Warrior: May I know whether in the view of the Chamber the foreign patents come in the way of development of the industries represented by the members of your Association?

Shri B. P. Khaitan: There have been so many collaborations with foreigners at high cost. That is purely with a view to acquiring their know-how including their patent rights.

Shri K. K. Warrior: May I know whether there is any difference of opinion between the collaborating interests and the non-collaborating interests?

Shri B. P. Khaitan: There will always be bargaining between the collaborating interests and the non-collaborating interests.

Shri K. K. Warrior: Which has the more predominant voice in your Chamber, the collaborating interest or the non-collaborating interest?

Shri B. P. Khaitan: Everybody wants to collaborate but all have not got the resources.

Shri K. K. Warrior: That is not the point. I want to know whether the collaborating interests are more predominant than others, whether their voice is felt more than others.

Shri B. P. Khaitan: The voice of collaborating interests is felt more.

Shri K. K. Warrior: So, your Chamber is to safeguard the collaborating interests more than others.

Mr. Chairman: You can form your own opinion.

Shri B. P. Khaitan: I can explain it. We are interested in buying the know-how. We want to give the least terms to the seller but yet we have to give him the price.

Shri K. K. Warrior: There are patent rights given to foreign collaborators or foreign-owned companies. Suppose they are not manufacturing those things here. Should these rights be given to them for importing these things only for sometime so that after sometime they may establish the industry here? What should be the attitude taken against those concerns if we find that they are not establishing the industry here?

Shri B. P. Khaitan: The Bill has already taken care of that and we have not objected to that. We have only said that royalties and other things should not be so low that people may be frightened.

Shri K. K. Warrior: May I know whether you agree to make a differ-

ence between the drug industry and the other types of industries?

Shri B. P. Khaitan: The Bill has already made that distinction.

Shri K. K. Warior: We have made it. But what is your opinion?

Shri B. P. Khaitan: We have not differed from that.

Dr. C. B. Singh: Mr. Khaitan, may I know how many patents are being utilised in the Calcutta region at the moment?

Shri B. P. Khaitan: I have not got that statistical information.

Dr. C. B. Singh: When we went to Calcutta, we were told that there were in all 8 patents and out of them, probably 4 were being used.

Shri B. P. Khaitan: I will not be able to give that information.

Dr. C. B. Singh: I am telling this to you. This is for your information. Only 4 patents are being used at the moment. My point is this. You have said that for helping research, you would like the period to be extended. That is the main argument. What are you doing to help research in your region? I agree with you that without research you cannot have any new products and that you cannot have more patents. What have you done to make an effort in that direction?

Shri B. P. Khaitan: My argument is based on a commonsense view of the matter, namely, in other foreign countries also, in order to encourage research, they have given a certain period within which a patent should be worked.

Dr. C. B. Singh: What have you done to encourage research here?

Shri B. P. Khaitan: I am answering your question. It is well-known that in India for many years there has

been no research. The question is how to encourage research. The idea of research has just started catching up. The question is: Will it encourage research or discourage research if the period is short? That is the viewpoint that you have to consider.

Mr. Chairman: There are several countries which have made this distinction. Take, for example, Canada.

Shri B. P. Khaitan: They are cases of developed countries.

Mr. Chairman: In Italy, they have no patent law for food and drugs industry. Japan had no patent for food and drugs industry. There are many countries like that. Why should you object if we make a difference in the interest of the public?

Shri B. P. Khaitan: All that I can say is this. You have to decide between the two views.

Mr. Chairman: There are some countries which have given 5 years or 7 years period for food and drugs industry.

Shri B. P. Khaitan: Those facts are to be considered by you.

Dr. C. B. Singh: In Calcutta, there is a post-graduate medical institute. Have you heard about it?

Shri B. P. Khaitan: I have not heard about it.

Dr. C. B. Singh: You have mentioned that in clause 48, there is no mention of royalty. What do you want? You want the royalty to be paid when this is to be acquired.

Shri B. P. Khaitan: Yes. I have already said that when there is compulsory acquisition by the Government, the objectives or the purposes for which it is to be acquired should be specified and there should be a provision or royalty also. It is implied that there will be a royalty...

Dr. C. B. Singh: What do you suggest? Would you like to suggest any figure here? Would you like that to be agreed to by the two parties concerned, by the Government and the other party, by mutual arrangement?

Shri B. P. Khaitan: It is all right if it is by mutual agreement. But, if it is forced, there should be a ceiling provided for as in the case of private users.

Dr. C. B. Singh: You have not made any mention about the right of appeal. At the moment, in case of dispute, the right of appeal entirely rests with the Drug Controller or it comes to the Government. Do you agree to this?

Shri B. P. Khaitan: We have not suggested that. The right of appeal should be to a judicial body. Either it may be an administrative tribunal with judicial bias or a high court.

Dr. C. B. Singh: Do you agree with the setting up of a special Patent Tribunal as is the case in some foreign countries?

Shri B. P. Khaitan: So long as the judicial authorities are there, it does not make much difference.

Dr. C. B. Singh: My last question is this. You have laid too much stress that the patents should be for a product. You have dealt with that in your memorandum. On this, we have varying opinions. You have mentioned two countries where they are patenting the process. But there are many other countries to-day where they are patenting what are called products; then there are others who are patenting both process and products. What are the reasons for your laying too much stress on products alone?

Shri B. P. Khaitan: That is because of a majority of our members representing pharmaceutical industries favouring this. The two views are already there. Personally I cannot understand the difference between the two and tell which is more important.

But, since a majority of our members wanted it, we have laid stress on this.

Dr. C. B. Singh: A majority of the people are in favour of products and not in favour of process. You cannot give the reasons because you do not understand the difference between the two.

Shri B. P. Khaitan: I have not been able to understand the difference between the two myself, this being a technical matter.

Shri M. L. Jadhav: You say that the period is for 20 years. Is it from the date of application?

Shri B. P. Khaitan: We have suggested 16 years. It should be from the date of grant of patent.

Mr. Chairman: They have already answered this question.

Shri M. L. Jadhav: Can you tell me whether the cost of medicines which are manufactured here in India is higher than the imported medicines?

Shri B. P. Khaitan: We have no knowledge of it.

Shri B. Kalyanasundaram: We have got another Association called Indian Chemical Manufacturers' Association. Perhaps that body has been called for giving evidence before this Committee. Since this is a technical matter, they would be in a better position to answer this question.

Mr. Chairman: It seems they are not competent to answer.

Shri Arjun Arora: Do you have any information about the higher rate of royalty and the lower rate of royalty paid by your Members to foreign collaborators?

Shri B. P. Khaitan: We have no information about that.

Shri Arjun Arora: Will you be able to collect this information and send it on to the Committee within a fortnight or so?

Shri B. P. Khaitan: We shall make an attempt.

Shri Arjun Arora: I hope you will be successful if you make serious efforts.

Shri B. P. Khaitan: I think collaboration agreements provide for royalties varying from 2 to 10 per cent. Of course, now, Government usually sanctions between 2½ per cent and 5 per cent. This varies with the importance of the industries.

Shri Arjun Arora: I don't want you to elucidate the government's policy. We have the Industry's Minister here. He will do so if necessary. What is the rate of royalty that your members want?

Shri B. P. Khaitan: All these collaboration agreements are with the Industry Ministry. The rates are also there. So I need not make an attempt to send you the information.

Shri Arjun Arora: Another question is this. You made a mention about research and development. You emphasised the importance of research in a developing economy. Have you given any thought to the development of drug industry in a country like Italy where there is no patent law?

Shri B. P. Khaitan: I am not competent to express any opinion.

Mr. Chairman: They have no knowledge of it.

Shri Arjun Arora: Do you have some information about Japan where there is no patent law? When they were developing, they had the patent law. They considered themselves that they had developed sufficiently to protect themselves. Now there is no patent law.

Shri B. P. Khaitan: On these subjects, I am not competent to say anything. As I said already, I have expressed my views from a commonsense point of view.

Shri Arjun Arora: Why do you insist on 16 or 20 years from the commonsense point of view? Why not six to seven years?

Shri B. P. Khaitan: That is my commonsense view.

Shri M. R. Shervani: I hope you will appreciate that this Bill is intended to increase the industrial growth and industrial development rather than to retard it. As far as the period of 16 years is concerned—this is what you recommend—don't you think that if the period is shortened, it will help the people to come into the industry to develop a particular product or process sooner and we will have more production?

Shri B. P. Khaitan: The whole point is that we have not undertaken that research so far. We are only concerned with the results. We must encourage research. We have to judge whether a longer period of protection will inspire the people to go in for research or not.

Mr. Chairman: Till now we had a longer period. Has it increased the research?

Shri B. P. Khaitan: Since when we had a longer period?

Mr. Chairman: Since 1947.

Shri B. P. Khaitan: This longer period has no meaning. The law is there. But the encouragement is not there. You know, Sir, Lancashire cotton had to be brought here to be converted into cloth. Similarly, jute went to Dundee. Such being the case, how can we think of research. During these 17 years we were busy in many other directions. The idea of research has now come to us by

way of contacts with foreign countries and foreigners.

Shri M. R. Shervani: The greater the production lesser the chance of development because other people would be discouraged. Where the patent is there and even if the period of the patent is shortened as in the Bill, still you will have five years lead over somebody else. That is more than sufficient to keep ahead of others who will put up industry on expiry of patent.

Shri B. P. Khaitan: To judge whether five years is sufficient, one has to take into account all the expenses and efforts which he has put in in order to do the research. So far as we are concerned, in our judgment, it appears that longer period would be better. You cannot objectively satisfy yourself. For this, what you have to do is to make a balance between the two objectives—one objective is to remove restricted practices and make them open to as many people as possible and the other objective is to see that research takes place. People are not shy of making research and putting in efforts because they think that after making their research, they are getting back their cost of research. You have to balance the two.

Shri M. R. Shervani: In your memorandum, you suggest that the minimum period of exclusive exploitation should be 16 years.

Shri B. P. Khaitan: That is what we have suggested.

Shri A. T. Sarma: In your memorandum you have suggested complete scrapping up of clauses 87 and 88. But the grounds given are not sound. Will you substantiate your statement?

Shri B. Kalyanasundaram: This clause provides that the royalty rate should not exceed 4 per cent. We feel that fixing up of a ceiling will not be conducive to get foreign

interests here. So, our suggestion is that, instead of fixing a rate under a statute, leave it to be negotiated between the parties by agreement. After all, the agreements are screened by Government. So Government have an effective say to regulate the rate of royalty. Wherever they feel that it is excessive, they need not give their consent to the agreement. So, as I said, instead of fixing the rate under a statute, you may leave it to be negotiated between the parties and Government has already got the power to screen it. That is sufficient.

Shri A. T. Sarma: Then there will not be any limit to royalty. There will be an inventor who will claim 80 per cent and you are bound to give it. Will it not be detrimental to the interest of the country? You may suggest increasing the rate of royalty. But you say that both the clauses should be dropped. There is a vast difference in increasing the royalty and dropping the clauses altogether.

Shri B. P. Khaitan: All collaboration agreements have to be approved by Government. Therefore, even if these clauses are not there, unless the Government sanctions, no royalty can be agreed to and no agreement can be finalised. So the purpose of that clause is served in that manner. As I said in the opening portion of my evidence, either raise the royalty which could be compulsorily fixed or leave it for negotiation between the parties subject to the overall control of the Government, which is already there.

Shri A. T. Sarma: You do not want these clauses at all?

Shri B. P. Khaitan: We have explained our view points. It is for you to decide.

Mr. Chairman: We were given to understand that 2 to 3-1/2 per cent is the royalty that is normally paid and 4 per cent is quite liberal. What is your view?

Shri B. P. Khaitan: We have already suggested that it should be left to be negotiated between the parties. While actually fixing the royalty, it may be 4 per cent or 3 per cent or even 2 per cent. In particular cases, 4 per cent may not be sufficient. If you make 4 per cent as the ceiling, then even if you feel that a higher rate is justifiable, you will not be able to pay.

श्री चौरड़िया : आप चाहते हैं कि अवधि बढ़ा कर सोलह साल रखी जाए। दूसरी ओर हमारे सामने उपभोक्ताओं का प्रश्न भी है। पेटेंट राइट अगर ज्यादा देर तक रहता है तो उपभोक्ता को अधिक मूल्य देना पड़ता है। मैं कुछ आपको उदाहरण देता हूँ। विटामिन बी 12 की प्रारम्भिक मार्किट प्राइस 2000 रुपये फी ग्राम थी और बाद में चल कर 40 रुपये फी ग्राम हो गई। इसी तरह से स्टेप्टोमाइसीन की पहले 19 रुपये फी ग्राम थी और बाद में एक रुपया फी ग्राम हो गई। क्लोरमफेनीकाल की 1900 रुपये किलोग्राम थी जो बाद में 240 रुपये किलोग्राम हो गई। इस तरह की कितनी ही मिसालें हैं। एक ओर तो रिसर्च के लिए इंसेंटिव देने का प्रश्न है और दूसरी ओर कंज्यूमर को उचित मूल्य पर ये चीजें मिल सकें, यह प्रश्न है। इन दोनों का हल हमें निकालना है। इसके लिए आप कौन सा तरीका सुझाते हैं? प्राइस कंट्रोल की परम्परा जो पहले से चली आ रही है, उसके बारे में आपकी क्या राय है।

श्री खेतान : हम आपके साथ सहमत हैं। प्राइस कंट्रोल जहां पर आप कर सकते हैं करें। आलरेडी यह चीज चल रही है। पहले से ही प्राइस कंट्रोल की परम्परा है।

श्री चौरड़िया : कम्पलसरी एक्विजिशन पेटेंट का करने के बारे में आपको आपत्ति है। मैं जानना चाहता हूँ कि क्या कोई ऐसी परिस्थितियां हैं जिन में आप गवर्नमेंट को

इस बात का आधिकार देने के लिए सहमत है कि उन परिस्थितियों में यदि सरकार चाहे तो उसको उपयोग में ला सकती है?

श्री खेतान : डिफेंस की आवश्यकताओं हों तो ऐसा किया जा सकता है। फूड शार्टेज हो, फेमिन हो तो उसके लिए ऐसा किया जा सकता है।

श्री चौरड़िया : आपका व्यापारियों का चैम्बर है। जो निर्माता हैं वे भी व्यापारियों का ही एक सेक्शन है एक तरह से। ड्रग्स वर्ग के जो निर्माता हैं उनका यह कथन रहा है कि हमारे लिये पेटेंट ला नहीं होना चाहिये, इससे हमारे निर्माण में दिक्कतें पैदा होती हैं। उनकी मुख्य दलील यह थी कि आज हम डिवेलोप नहीं हैं पूरी तरह से। पहले हम नकल कर लें, फिर उसमें सुधार कर लें और फिर नई नई खोज करके हम अपने यहां पर विकास कर सकते हैं। आपका जो चैम्बर आफ कामर्स है यह एक्सचेंज में ज्यादा विश्वास करता है। उधर से खरीद कर इधर बेचने में और इधर से खरीद कर उधर बेचने में ज्यादा विश्वास करता है। आप चाहते हैं कि सोलह वर्ष की अवधि हो। अब हम बड़े धर्म-संकट में पड़े हुए हैं कि हम आपका कथन मानें या निर्माण करने वालों का कथन मानें। हम चाहेंगे कि आप हम को मार्ग-दर्शन दें।

श्री खेतान : बेसिक चीज यह है कि पेटेंट राइट्स को प्रिजर्व करना पड़ेगा, वर्ना रिसर्च नहीं होगी। कोई आदमी कोई नई चीज क्यों बनायेगा, अगर वह उसको बनाने के बाद उसका फल एन्जाय न कर सके? हमने पहले ही अपने से व्यूज रख दिये हैं कि इस बिल के आबजेक्टिव्स से हम लोग सहमत हैं, लेकिन साथ साथ दोनों की आवश्यकताओं का संतुलन आपको करना पड़ेगा। यह आप के सोचने की बात है कि आप यह किस तरह से करें।

Mr. Chairman: All the patentees are not carrying on research in India. They are not even manufacturing the patented articles here.

Shri B. P. Khaitan: That is so.

Mr. Chairman: It is to prevent such abuses that this provision is there.

Shri B. P. Khaitan: There are two parts here: one is government user and the other is private parties. So far as private parties are concerned, the Bill provides for adequate compensation. But so far as government user is concerned, it has been left vague and the area for which the compulsory acquisition can be made has not been defined. Therefore, so far as government is concerned, it should be defined that it can be acquired only for specific purposes under certain conditions and in the case of private parties, an opportunity should be given to the patentee, "well, you have not utilised your patent; utilise it within six months; otherwise, we will acquire it."

Mr. Chairman: When he has not utilised it within a reasonable period, why should he be given a further opportunity?

Shri B. P. Khaitan: He might not have been able to utilise it due to circumstances beyond his control and if he is given another two or three months, he may be able to utilise it.

श्री चौरङ्गिया : क्या आपको ज्ञात है कि पेटेन्ट की सिक्युरिटी होने की वजह से ही विदेशी कम्पनियाँ अन्तर्राष्ट्रीय बाजार में कम कीमत पर माल बेचती हैं और वही माल भारतवर्ष के बाजार में ऊँचे दाम पर बेचती हैं इसी के सम्बन्ध में यू० एस० ए० की सीनेट की रिपोर्ट नम्बर 448 में कहा गया है :

India which does grant patent on drug products, provides an interesting case example. The prices in India for the broad spectrum antibiotics, Aureomycin and Achromycin are

among the highest in the world. As a matter of fact, in drugs generally, India ranks amongst the highest priced nations of the world—a case of inverse relationship between per capita income and the level of drug prices.

ऐसी स्थिति में अगर हम आपके कथन नुसार पेटेन्ट की अवधि 16 वर्ष कर दें, तो हम और आफ़त में फंस जायेंगे, जबकि हमारी आमदनी पहले ही कम है और संसार के मुकाबले में हम से अधिक पैसे लिये जाते हैं। जब आप हमारे आबजेविटबल से सहमत हैं, तब आप हमको कोई ठीक रास्ता बतायें, ताकि हम दोनों साथ साथ चल सकें।

श्री खेतान : उसका और कोई रास्ता निकालना पड़ेगा, जैसे प्राइस कंट्रोल है।

Mr. Chairman: I would like to point out this to you. Please see clause 102 which says:

"The Central Government may, if satisfied that it is necessary that an invention which is the subject of an application for a patent or a patent should be acquired from the applicant or the patentee for a public purpose, publish a notification to that effect....."

So, both public purpose and notification are there. It will be done by notification.

Shri B. P. Khaitan: We have only suggested that the purposes should also be defined.

Mr. Chairman: It will be a public purpose. Notification will certainly mention it.

Shri B. P. Khaitan: Government have got unlimited rights. I may also say that clause 102 has to be read with clause 99 which says:

"For the purposes of this Chapter, an invention is said to be

used for the purposes of Government if it is made, used, exercised or vended for the purposes of the Central Government, a State Government, or Government undertaking or any other undertaking in a class or classes of industries which the Central Government, having regard to the interests of the general public may notify in this behalf in the Official Gazette".

The purposes for which such notification can be issued are not provided.

Mr. Chairman: The notification will mention it.

Shri B. P. Khaitan: Under the Land Acquisition Act, it is provided that it can be acquired for a public purpose and public purpose is defined. In this Bill you do not provide the purposes for which Government can acquire.

Shri R. Ramanathan Chettiar: Your Chamber's Memorandum, from the beginning to the end, suggests that this will act against the inflow of foreign capital in India. You know that the purpose of this Bill is to prevent foreign capital coming here on a monopolistic basis. We can have foreign capital on a collaboration basis with our Indian entrepreneurs, but not on the basis of cartels or monopoly basis. That is the object of the Bill, and I am sure you will agree with this. Unfortunately your memorandum gives an impression different from this. This is at least the impression I got reading between lines of your memorandum.

Shri B. P. Khaitan: We never meant that. We said that foreign collaboration is now on the basis of 25 per cent participation and if their rights are not protected they will not collaborate. This is what we meant. We never meant the other thing. In fact we agree with you.

Shri R. Ramanathan Chettiar: Another point is, you are stressing more on the product rather than the pro-

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cess. Have you any objection to this Bill covering process-cum-product?

Shri B. P. Khaitan: That will meet our point.

Shri B. K. Das: In your opinion the clause relating to licence of rights is the most objectionable. This is a special clause provided so that any person can exploit any patent for preparing drugs and medicines. Royalty has been provided and other provisions are also there. Why do you object so much to this clause especially when high prices are charged by foreign patentees? They are only importing and not exploiting the patents here. We are trying to make a special provision for manufacture of drugs in this country so that all this misuse may be eliminated. Why do you object to this?

Shri B. Kalyanasundaram: We have explained that in our memorandum. Something is manufactured out of very expensive research by somebody, and somebody else gets hold of a licence and starts manufacturing it.

Shri B. K. Das: In the life time of the patent, nobody can ask for it.

Shri B. Kalyanasundaram: We have made a specific suggestion. That is to give notice to the patent-holder that if he does not produce it, we shall give licence.

Shri B. K. Das: That means you are in favour of compulsory licensing.

Shri B. Kalyanasundaram: Yes, after giving an opportunity to the patent holder.

सरदार बलजीत सिंह : आल इंडिया मैन्युफैक्चरर्स एसोसियेशन और दूसरे एसोसिएशंस ने कल यह कहा है कि फारिनर्स अपना पेटेंट यहां रजिस्टर करा लेते हैं लेकिन मैन्युफैक्चर नहीं करते हैं ताकि हिन्दुस्तान वाले उसको मैन्युफैक्चर न कर पायें और एक बात यह बतायी है कि बहुत सा माल इम्पोर्ट किया जाता है, वह मैन्युफैक्चर नहीं करते, बल्कि ब्लैक मार्केट में देते हैं। लेकिन आपने यह

राय दी है कि इन तमाम कंटीज से राय लेकर इस बिल को तैयार किया जाय जैसे कि यू० के० है, फ्रांस है, वेस्ट जर्मनी वगैरह हैं, तो मैं जानना चाहता हूँ कि उनकी राय और आपकी राय में यह अन्तर क्यों है ?

Shri B. P. Khaitan: I think we have basically answered this question and that is about price control and all that. If patent is not used, then after giving notice to the patent-holder other people should be allowed to use it. We have covered all these points either by implication or expressly.

Sardar Daljit Singh: You have said that in 1961 the United Nations passed a Resolution that its Secretary General should report on the existing patent systems in developed countries and the role of patents in the transfer of technology from developed to developing countries. May I know which technology has been.....

Mr. Chairman: That has been covered.

Shri Shyamnandan Mishra: One construction generally put in for the strong plea that the Indian industrialists make for patent rights is that it is not because of their solicitude for the Indian enterprise and initiative so much in this field but because they want to enter into some kind of collaboration agreement with foreign patentees and thereby they also want to enjoy all those privileges and rights that would be granted to foreign patentees. Will the witnesses kindly clear this point so far as this popular misconception or misunderstanding is concerned?

Shri B. P. Khaitan: This is based on a slight misconception. We will not be able to induce a foreign patent-holder to bring his knowledge to India and transfer his patent or collaborate with us unless his product is protected. It is not for protection of the Indian collaborator, it is because he will not collaborate with us unless his rights are protected. We

are in need of foreign know-how. This is the fundamental basis on which this opinion has been expressed. We can induce a foreign collaborator to come here on the basis of his rights being protected. If his rights are not protected he will not come.

Shri Shyamnandan Mishra: Know-how is a different thing altogether from patent. Know-how can be purchased as is done in many countries. Of course, know-how is associated with patent, but know-how can be purchased.

Shri B. P. Khaitan: Know-how is certainly a wider term than patent, but patent is nothing but know-how.

Shri M. R. Shervani: With regard to clauses 87 and 88 you say that these clauses may have serious adverse repercussion on research. May I know whether the expenses incurred on research are allowed by the income-tax laws as revenue expenditure or not?

Shri B. Kalyanasundaram: Yes.

Shri M. R. Shervani: That means the State Government or the Government of India has already contributed 50 per cent towards the cost of research and the amount spent by the parties on research would be half their actual expenditure?

Shri B. Kalyanasundaram: Our approach has been slightly different. We are talking of research done in foreign countries and the product arrived at by reason of that research and patented here.

Shri M. R. Shervani: In foreign countries also research expenditure is allowed by the income-tax department. That means the actual expenditure on research is less than half the total expenditure. Is that right?

Shri B. Kalyanasundaram: That could be.

Shri M. R. Shervani: You say that compulsory licensing or licensing of rights would result in all sorts of people getting free licences and manufacturing drugs of inferior quality.

Why should you have lack of confidence in the judgment of the Controller? The Controller grants a licence only after taking into consideration the financial capacity and technical ability of the party concerned.

Shri B. Kalyanasundaram: You cannot take it for granted that whenever the Controller gives a licence he will give it only to parties who can do the job properly. We know that in the matter of industrial licensing so many have become infructuous. Therefore, there cannot be any presumption that because the Controller gives the licences the parties will be able to do the job.

Mr. Chairman: We have no more questions to ask you. Thank you very much for coming and helping the committee by giving evidence.

(The witnesses then withdrew).

H. Associated Chambers of Commerce and Industry of India, Calcutta.

Spokesmen:

- (1) Mr. C. A. Pitts.
- (2) Mr. A. B. Parakh.
- (3) Mr. I. Mackinnon.

(The witnesses were called in and they took their seats)

Mr. Chairman: The evidence that you give is public. It will be printed and distributed to the members of the Committee and Members of Parliament and also laid on the Table of the House. Even if you want any particular portion to be treated as confidential, it will be printed as circulated to the Members of Parliament.

We have received your memorandum and it has been circulated to Members. If you want to make out any new point, or stress some particular point, you may do so. Afterwards, our members will ask questions.

Mr. C. A. Pitts: First of all, gentlemen, may I thank you for this

opportunity for the Associated Chambers of Commerce and Industry to present their point of view to you in person? May I perhaps begin with just a word about the nature of the organisation which we represent?

The Associated Chambers of Commerce and Industry, or ASSOCHAM as it is usually called for short, is an apex organisation on the top of 11 chambers of commerce and industry which in fact cover the whole of India geographically. These 11 chambers altogether have more than 2,500 member-companies, and these companies employ more than two million men and women. The organisation represents strongly wholly Indian industry, but it also represents, again strongly, many examples of collaboration and partnership between Indian and foreign concerns. And, finally, there is to be found within its ranks every conceivable kind of industrial activity, right from the traditional industries such as tea, coal and jute right through to the most modern industries employing the very latest technology available in the world.

We three, gentlemen do not come before you as legal experts in the context of patent law. We are practising men of business, professional managers who live and work in India, and it is not our task to be concerned with any high-strung discussions of the principles of private ownership, or technical property, or anything of that kind. We are concerned in our comments only with the practical down to earth effects of this Bill on the pace of development of India's industrial plans. We would like to submit that against this general background, it is necessary to view the Patents Bill not as a Bill by itself in isolation, but just as a tool or as part of a set of tools in the hands of the Government and the executive, designed for ensuring the effective and the prompt development of India's industrial economy and for safeguarding the essential interests of that economy and hence of the Indian nation. Now, against these criteria, how, in

Ascham's view, does this Bill measure out? It is, in our considered judgment, a Bill which contains certain provisions which far from accelerating the pace of India's industrial development, will tend to slow it down and prove not beneficial but harmful to the public interest. There is also, we feel, a tendency to regard this Bill as being concerned almost essentially with food and with drugs. But in our view, this is misleading. A number of provisions of this Bill—e.g. clauses 48, 53, 89, 93, 99, 100 and 116—have a direct effect on the total climate as it were which affects all of industry within this country. More specifically, clause 87(a) (iii) dealing with licences of right seems to us to affect the whole of the chemical industry; and the chemical industry is, of course, a very wide and a very diverse thing which includes products as different as modern plastics and polymers, synthetic fibres, dyestuffs, modern synthetic paints and so on, as well as the whole range of organic and inorganic chemicals.

Now, we would like the Bill to be considered—we think it could be considered most usefully—under two broad headings; first what we regard as its domestic effect within India and secondly what we would regard as its international effect.

Now, it is our contention, gentlemen, as set out in our memorandum, that the cumulative effect of those powers in the Bill which are totally reserved to Government, as in clause 48, the summary and retrospective curtailment of the terms of the patents as in clause 53, and the clauses relating to licence of right set out in 87 and 88, would be to remove—I can give some instances—or greatly reduce that protection which has hitherto been accorded to the fruits of research and invention and, in our view, the effect of this domestically can only be to discourage research, and even where research continues to be carried on, to cause the results of it to be suppressed. This, in our view, would be a very great loss to the nation and

a very great loss to the source of important materials for the academic and scientific world of India. We would submit that in the broad context of what India is trying to do, it is difficult to reconcile such a policy which we believe to be inherent in this Bill, with the call that the Government through its leaders and Ministers has been making in recent months to industry for a great increase in the research efforts in the drive to achieve self-sufficiency. Ministers have gone so far as to suggest in public addresses that they would consider greater incentives in order to promote a greater effort on research. And it does seem to us that in this area, the effect of this Bill as we see it, is incompatible with that declared policy of Government.

This is a highly technical modern world. Science and technology call the tune in the pace of industrial advancement as can be seen by a glance at any of the leading industrialised countries of the world. It seems to us—we submit this view with all deference—that it is contrary to the national interests that in this year 1966 India should be initiating an action which, in our view, will discourage and deter research and development and would encourage the suppression of important scientific information. There is another point here. Let us consider the effect of this on the large body of extremely able young Indians who are now beginning to be turned out of academic institutions, highly trained and ready and eager to participate in a research effort which will benefit their country. We believe that the by-product of this depressant to research will be a correspondingly greater temptation for these young men to go elsewhere in the world to find the satisfaction that they will be deprived of in their own country. India will find itself faced with an increasing "brain drain" as it is being called in other parts of the world.

Internationally, in the view of Assocham, this Bill could have a num-

ber of harmful effects. Here again I would like to make a reference to what has been declared to be Government's policy regarding foreign investment and the need to achieve a more rapid implementation of India's Plans to encourage foreign investment and the importation of modern technology in those fields where it is thought that it would be a matter of priority. Almost all the highly industrialised countries of the world, who are owners of this extremely modern technology which India desires, adhere to the principle of strong patent protection. Even those countries who hitherto have been outside of this, such as Italy, are now reported to be coming into line and having within their country a law which does afford a strong patent protection. In Russia, too, which is, so to speak, outside the democratic world, has seen the value and the force of such a system of protection. The whole trend in the industrialised countries is towards harmonising their patent laws so that they are in step with each other so as to encourage and make easy trade in technical information and indeed trade in technical products. It is our judgment that the effect of this Bill will be to breed dismay in the minds of those owners of modern technology overseas who are interested in India as an area of investment because they see apparently a wish of the Government of India substantially to reduce the protection afforded to patents not only in the future but summarily, so to speak, in respect of patent protection already granted. But more than that, we believe that these countries, because of this, will be reluctant to seal their patents in India and to publish the extremely valuable scientific information that they contain. This will be a great loss to India's academic and scientific institutions. I would like, if I may, for a moment to draw attention to the difficulties which this Bill would bring in the way of the movement of goods for exports. If India's patent laws are not generally in line with those of the world to which she seeks to export her manufactured goods, impe-

diments to export are likely to arise in those cases where goods manufactured in India outside of patents are sought to be sold in countries in which they are still covered by valid patents.

There is another aspect which we have not touched in our Memorandum. India is rightly regarded as the leader among the developing countries of the world, and the kind of patent law that she brings into effect is likely to be something of a leader in the eyes of the countries who are following her. Now if they follow what, with respect, may I call a bad example, India would suffer in the future when she herself wishes to sell in such areas, the fruits of her own research. Conversely if those countries in fact do not follow this example but adhere more closely to the conventions which are practised in the West, then India would suffer by comparison as being an area which is comparatively less attractive to foreign investment than those newly developing countries.

I would like also, Gentlemen, if I may just for a moment to suggest that some consideration be given to the practical effects of some of these clauses. If pharmaceutical patents are to be limited to 10 years, it is I think demonstrable that in many important cases, beneficial production does not really begin until 7 years have elapsed from the date of the sealing of the patent, which means that only 3 years are left to the owner in which to recover the very large expenditure on research and testing and development—leave alone to recover any expenditure which has proved abortive on other products. Now what is he to do in these 3 years. The logical answer would be to pitch the price so abnormally high that he will be able to recover in a short time this expenditure. This seems to be precisely what Government of India wishes to avoid. It wishes the prices to be kept as low as possible. It seems logical that where protection is given, it should be given for sufficiently long period so that money can be recovered

steadily and not suddenly in very large lumps and we strongly urge that there should be no discrimination in the matter of treatment of patents against the drugs industry. Indeed, we could, I think, easily adduce arguments for, in certain instances, granting a longer term of patent protection to certain kinds of drugs.

May we, Gentlemen, just for a moment, also consider the practical effects of the proposal in clause 87 concerning "Licence of Right". It seems to us that simultaneously with the publication of the patent affecting drugs, or food or chemical substances, any person—presumably any number of persons—can as a right become the possessor of a licence. The only thing to be settled is the terms which the owner of that patent will give to the individual licence holder. One could imagine a situation where—particularly when it is a promising looking patent—one dozen, two dozen or 5 dozen people may want a licence. The unfortunate Controller will have to try to determine what are the reasonable terms for all of them. When they get the licence and get their terms, how does it tie in with the industry's development. Do they all go over to another section of the Government to get a licence? If all 25 or 35 get such a licence, is any one of them in fact going to or willing in such a competitive situation, to implement it. Of course when he has got the licence, he has only got the licence; he has not got the know-how, which is a separate subject.

These clauses 87 and 88 pertaining to these Licences of Right will in fact lead to a chaos and a very large load of wasteful administrative work with little or no compensating benefit to the country.

An hon. Member: Will lead to chaos?

Mr. C. A. Pitts: Probably chaos is a strong word. What I mean is there may be very many many people all trying to get the same licence. The Controller will be charged with trying to arrange for mutual terms. They

have got to decide about the licence which is another heavy load of administrative work. I am sorry, Sir, I withdraw the word.

Finally, Gentlemen, we would like to make a brief reference to the question of appeals which in the view of ASSCHAM are adequately catered for in the Bill. We would like to recommend that in addition a judicial Appellate Tribunal be set up which in our opinion, would do much to restore the confidence which some of the proposed measures have taken away.

Now all that I have said, I am afraid, has so far been rather destructive. I would, if I may, like to end on a constructive note. We do accept, of course, the fact that a Act that has been on the Statute Book since 1911 does need to be brought upto date in number of respects. I would also like to submit that the Act as amended has in fact stood the test of time very well and that if there is any need to make any additional provisions so that the products or processes which are vital to the economy, be brought into production quickly, then let it be done simply with no corresponding psychological or deterrent effects by modifying and revising those clauses relating to compulsory licences. That is, Sir, as much as I have to say as a general comment.

Dr. C. B. Singh: Mr. Pitt, you have been talking about research. I entirely agree with your remarks. May I know what effort your organisation is making towards that? Have you some idea about the money being spent or the people being paid as far as research is concerned.

Mr. C. A. Pitts: I think you are asking about the inside effort. Or are you referring to the world effort?

Dr. C. B. Singh: Your effort inside and outside both.

Mr. C. A. Pitts: As far as ASSCHAM is concerned, the situation differs from one industry to another and I think it would not be proper for me at the moment to

answer for lack of reliable information with me. Perhaps Mr. Mackinnon could talk about the pharmaceutical industry and Mr. Parikh could talk about those industries with which he is personally familiar. As far as ICI is concerned, it spends a large amount of money on research and development. The figure, I think, is round about 20 million pounds a year. It may even be more. I would not like you to regard it as an accurate figure.

Shri R. Ramanathan Chettiar: What is the percentage?

Mr. C. A. Pitts: It would be of the order of 3 to 3½ per cent. In India, the ICI, having to manufacture in a number of fields, is now doing research work essentially of the applied nature in order to make the fullest use of Indian raw-materials, in order to adopt processes suitable in Indian conditions and a very great effort is being made to train Indian staff not only within India but through other members of the ICI Group across the world.

Dr. C. B. Singh: May I know the percentage spent on Research in the pharmaceutical industry?

Mr. I. Mackinnon: Mr. Chairman, I am not here to speak on behalf of the pharmaceutical industry, and I am very anxious that anything I say may not be taken as contradictory to what the representatives of the pharmaceutical industry state themselves. I can speak only from personal knowledge. Pharmaceutical industry is essentially a research and development based industry. It is my impression that those members of the industry who are concerned with the development and manufacture of modern drugs are today spending some 2 per cent of their turnover on research and development. This would be the approximate figure in my own organization and I have had

the privilege of showing. Mr. Chairman and some of the distinguished members of this Committee what that effort looks like on the ground. But I would be the first to concede that this effort is small in relation to the effort that is being put into pharmaceutical research in other countries of the world. In some developed countries of the world the proportion of turnover would be somewhat in excess of 5 per cent, and in some cases, expected to be above 10 per cent. I would submit, Mr. Chairman, that the figure in India, which is low, has nothing to do with the previous or the existing patent legislation. It is essentially a matter of the present stage of industrial development in the country. In a comparatively short time, the drug industry has developed from being a relatively small collection of distributors to being a manufacturer using some of the most advanced modern technology in the production of drugs anywhere in the world. And it is the next stage in the industry's development where research and development necessarily take place here in India, partly in order to protect that investment that has already been made against competition either from within India or outside, partly to improve on the methods and the processes that are being used in various companies in the industry, and partly to development of new methods of manufacturing drugs, new advance in medicine and to take full advantage of Indian raw-materials, Indian scientists and technical staff. We have in our industry a very large measure of expertise that we have been able to develop over the last 10—15 years. I submit that with adequate patent protection, this figure of percentage on research is bound to rise in next course of the industry's growth and development.

Dr. C. B. Singh: You think that just by a strong patent law the research will be automatically improved in this country? Is that your contention?

Mr. I. Mackinnon: Yes, Sir, other things being equal.

Dr. C. B. Singh: My feeling is that 2 per cent figure is a little higher figure. Evidence has come here that in India—in Eastern or western part—hardly anything has been done as far as research is concerned. 2 per cent is a very big sum. If your figure is correct, I would be happy. But my feeling is that definitely not even 1 per cent is being spent as far as research is concerned. My feeling is that our patent law is already strong enough—16 years protection has been provided; there is nothing wrong with it; there were certain defects that we are modifying. In spite of a strong patent law, hardly anything has been done in this country. That is our trouble. Supposing we make these changes, how could we be sure that they will be spending more money on research? Research, as you know, is the very basis of finding new methods. Just by a strong patent law, will it be possible for you to spend more money on research, or something else has got to be done? That is my question.

Mr. I. Mackinnon: In answer to this question, I would say that I have made a statement originally that I can speak only of a certain group of companies in the pharmaceutical industry who are using imported technology in the production of modern drugs. I cannot speak for the pharmaceutical industry as a whole. My figure of 2 per cent, I am sure, will be substantiated by the representatives of PPI who appeared before you a few days back. I am sure, that figure is broadly speaking, correct. But I entirely agree that it is a low figure. But it seems to me that one first establishes a process, one first gets manufacture going on economic basis, and then you turn to the research and development. But this will happen when the patent protection is strong and adequate.

Dr. C. B. Singh: We have already three types of protections, viz., (i) product protection, (ii) process protection and (iii) product-cum-process protection. Now you have mostly pleaded for product protection. Why?

Mr. I. Mackinnon: If I have given the impression of so pleading, it was not intentional. I am not going into the relative merits of products as against processes over the whole range of industry. I am not so qualified to say that. We thought we shall be able to get some better idea from you. Anyway it is all right if you cannot express an opinion on that.

My second point is about clause 48. You have mentioned that this clause should be deleted more or less almost because it cuts at the root of very protection. You remember we are having certain difficulty—I am talking about certain particular drugs for T.B. etc. and other vital drugs—these are very common drugs and we know in the use of these drugs those who have patent charge very high prices. So with that aim in view to make it impossible for those patentees Government will be able to take advantage of this clause and get these drugs either from here or by importing them. That is why we have put this clause. What you have to say about it?

Mr. C. A. Pitts: We take the view that Government here assumes, in fact, total power to declare as free of infringement any patent of anything. What we say is that this total power has a psychological effect and is a deterrent. Government has ample powers elsewhere in the Bill to bring about its wishes either in the chapter 17 and so on or by the device of Compulsory Licences.

Dr. C. B. Singh: So what do you suggest? I agree that Government has ample powers. Will you suggest that Government should pay reasonable compensation while taking over any patent?

Mr. C. A. Pitts: I would say that clause 48 becomes very similar to clauses 99 & 100 and there is no need for clause 48.

Dr. C. B. Singh: I think it does become similar. If that is agreed you agree to a compensation on reasonable terms.

Mr. C. A. Pitts: My point really is clauses 99 & 100 take care of it and Government could achieve its wishes without clause 48 which causes this feeling of total power of the Government taking any patent at any time.

Dr. C. B. Singh: You think that that section is enough for the Government. You want complete deletion of clause 48.

Now what are your views about clauses 87-88? What you think will be an adequate compensation? We have suggested maximum of 4 per cent. Do you agree that maximum of 4 per cent is enough?

Mr. C. A. Pitts: No, Sir. I would suggest that all products and processes are to be considered on their merits. In some cases it could be 4 per cent; in some other cases it can be too much and too little. Some guidelines would have to be formed so that each case could be judged on its merits.

Dr. C. B. Singh: What will you suggest?

Mr. C. A. Pitts: I will say through mutual goodwill on both sides. The suggestion of some judicial body to arbitrate would be the most happy solution.

Dr. C. B. Singh: Clause 116—Appeals. What do you think about the Appeals? The Appeal has been left with Government because there have been people who obstructed and good things have not been supplied to the people at large by certain patent interests. That is why we have brought this clause.

Mr. C. A. Pitts: I think, Sir, the dispute should be dealt with in a diff-

erent way and not by, so to speak, removing any right to a judicial appeal in the whole of enactment. I think there is already power in this Act to sanction the getting of manufacture pending the result of negotiation. This by itself avoids delay but I do not see why one could not administratively deal with delays.

Dr. C. B. Singh: We cannot go against the High Court. The High Court will not simply listen and, as such this power is being taken over by the Government. What will you suggest in this regard?

Mr. C. A. Pitts: We have suggested Patents Appeal Tribunal consisting of single judge on the lines of the British precedent which according to our information works well.

Shri M. L. Jadhav: You know the Model Law. According to Model Law the term of Patent is for 10 years. Do you agree with it?

Mr. C. A. Pitts: I do not agree with 10 years as the one and the only term. If it is extendable, according to some criteria, if necessary, by another 7 years that I think would be better than the flat 10 years which is inadequate and brings out results which are high prices.

Shri M. L. Jadhav: Are you aware of the fact that the prices of some of the drugs in India are much higher than they are in other developed countries? What would you suggest to bring down these prices?

Mr. I. Mackinnon: Mr. Chairman, I do not accept the statement that on the whole drug prices to the consumer in India are higher than they are in other countries of the world. I do not deny that this may be true in some cases but there are many cases where the consumer has to pay much lower here in India than in other countries. I have no detailed figures to put forward to prove this contention. OPPI representatives will be able

to throw much better light on this aspect.

My own experience why drug prices are as high as they are in India is entirely because costs of manufacture of drugs are as high as they are and the concerns of pharmaceutical manufacturers have to cut down the costs.

The concern of the manufacturers is to keep down the costs. There are two aspects of this. One concerns the high cost of materials and the other concerns the relatively high cost of labour. In so far as materials are concerned, which is a smaller part, the imported material by and large has been until recently subject to rates of duty that are as high as 70 per cent. In addition, there are the freight and landing charges, so that one can say that the average cost of the imported raw material here is something like double what it is in the country where this material originates. For the much larger component, which are raw materials and packing materials purchased locally, it is the experience of the average pharmaceutical manufacturer that they cost between two and three times what they do in the developed countries. This is essentially a reflection of the current state of development of the country.

We all know that until there is a highly developed organic chemical industry here in India which is developing now, the cost of many of the basic materials and intermediates that are used in drug manufacture is necessarily going to be high, but it is our assumption that as industrial and technological development proceeds in those industries that supply us with our raw materials and the packing materials, those costs will come down. Certainly they should come down relatively to other things.

Then, if I may say a word about the other main component, labour, there is, I am afraid, an impression in many minds that this is a low labour cost country. In the pharmaceutical industry, at any rate, it is

my experience that this is not true. Our labour costs are relatively high to what they would in other parts of the world. There are two reasons for this. One is inexperience, which it is our duty to do something about. Our hope is that as one progressively trains the workers to be more efficient and to be able to do a wider variety of jobs, the effect will be to reduce the cost of labour per unit of output. But the other principal reason, I think, is that we are working under very much more difficult conditions so far as labour is concerned than in many of the highly automated plants in the West. We operate on a much smaller scale. We do not go in for automation of processes in the drug industry, not even of packing, let alone manufacture, because this is not at the moment technologically feasible, and therefore we are using labour wastefully as compared to some of our opposite numbers elsewhere.

One other point, of course, is that in this country most of us in the larger pharmaceutical companies are paying to our workers dearness allowance on a fairly generous scale based on the cost of living index, and as a result of the rise in the cost of living index over the last year or two, despite what we wish to do and are doing to improve labour efficiency, the cost of labour is, in fact, rising and rising rapidly. Because of this, both on the raw material side and on the labour side, our costs are extremely high, and I would not like to leave the impression that drug prices are high because profits are high. It is my submission that drug prices are high primarily because costs are high. Even so, the prices that the consumer pays for drugs in this country by and large are no higher than in most of the developed countries of the world.

Mr. Chairman: In drugs like chloromycetin, tetracycline, prednisolon, tolbutamide etc., the rate here is 500 to 1100 per cent of that in the other countries.

Mr. I. Mackinnon: I would suggest that the right comparison to make is between the selling price and cost of production, and not the selling price here and the selling price somewhere else. When I had the pleasure of entertaining yourself, Mr. Chairman, and the other Members in my Thana plant, I had explained that one of the products we make, namely Vitamin "A" is priced extremely high in this country compared with world prices, but, in fact, the cost of delivering the raw materials to the factory gate before any manufacture starts at all, is higher than the world price of the finished product. This is something over which we, as manufacturers, have no control at all. I suspect that it is the case in most of the examples you have cited, but I cannot prove it.

Mr. Chairman: These are figures culled out from the report of the Reserve Bank.

Mr. I. Mackinnon: I submit the cost of imported component, the high cost of local labour and other raw materials purchased locally together explain why the cost of production in India is in many cases several times higher than the effective world price. I may add that it is sometimes difficult to know what price is a true reflection of the world prices. It may be a price specially quoted for marginal business to a particular country; it may not be in fact the going price that most consumers have to pay in other parts of the world. I suggest that OPPI are the best people to give a detailed answer to these questions.

Shri Arjun Arora: What would be the best method of securing a progressive reduction of prices of drugs in India?

Mr. C. A. Pitts: If I can make a generalisation here, it is not only drugs. There are many things in this country whose manufacture cost is very much higher than it is in some of the advanced countries of the world. There are many factors. As

suggested by Mr. Manubhai Shah—an admirable suggestion, each of these should, in fact, be analysed in little cells set up to look at every ingredient of cost in all the important industries. Is it raw material, is it scale of operation, is it labour, is it excessive overhead, excessive salaries and management, excessive profits, is it the effect of Government policies? The ingredients of cost can be analysed and found in all industries, including drugs, and I would suggest what needs to be done first is to have this open examination of what makes up the cost to see in what ways cost can be brought down. It is very difficult to prescribe a remedy across the table.

Shri Arjun Arora: Don't you agree that the existence of a patent law encourages prices and is to a certain extent responsible for high prices?

Mr. I. Mackinnon: It is our contention that while a patent does, in fact, confer a limited monopoly on a process or a product for a limited period, and to that extent it is possible within the terms of the patent for the manufacturer to charge a higher price during the term of the patent than he would otherwise, the provisions of the patent law, either this one or any other, are not a significant factor in determining the general level of prices. Whether you have a strong patent law or a weak one is not a major determinant of whether prices are generally high or not. Certainly, however, it must be borne in mind that without a strong patent law, costs of production are likely to be higher than they are with a strong patent law, since it will be necessary to acquire the know-how and experience by the long-drawn-out and costly method of development for oneself and all the mistakes and false starts and waste that go into the doing of it. If the effect of a weak patent law is to make the know-how the more costly and to make the cost of production higher than it would otherwise be, I submit it can

be claimed that the prices on the whole are lower as a result of strong patent law than they would be otherwise. I distinguish between individual products where anything can happen in a particular experience, and patented products generally.

Shri Arjun Arora: The witness, I take it, is aware of the case in Britain when they found that because of the patent law they had to buy medicines at a costlier price, they chose to buy drugs from Italy where there is no patent law and thus force the British industry to bring down the prices. In the face of this example, how does he say that if there is no patent law or no patent protection or no patent protection of the order of which he is fond, the prices of drugs will be even higher?

Mr. I. Mackinnon: It is my recollection, that there were only two or at the most three products involved here and I have not ruled out the possibility of particular situations in the case of particular products. I was talking about the position of drug prices or any other prices generally. So far as the particular instance that the hon. Member has referred to is concerned, the prices at which these products were imported into the United Kingdom were not the prices at which they were sold to the Italian public, and I believe that OPPI will submit evidence to prove that in a country where there are no drug patents in existence, on the average and in practically every case, the prices to the consumer of the drug are higher than they are in those countries in western Europe where patent protection exists. The fact that the British Government were able to buy large quantities from Italy at extremely low prices, lower than those prevailing in the domestic market, is not to my mind an argument against patents. But I am not an expert in patent law and I am very well aware that there was a particular point in the British patent law which was in dispute there, but it was not so much a ques-

tion of prices; it was a question whether it was possible to buy drugs for the National Health Service under a new clause in the Act which permitted the use. Since I am not an expert in these things, I should think I should say as little as possible.

Shri Arjun Arora: Can you give us an idea as to whether your members who have secured the patents have recovered the cost involved in research?

Mr. C. A. Pitts: This varies tremendously with the activity.

Shri Arjun Arora: Let us take the commodities called drugs.

Mr. C. R. Pitts: I think these are specialised matters which the OPPI on Friday could handle much more adequately than this delegation. To my knowledge, there are many examples which are in fact not enough to cover the cost, because the technological advance and so on become outmoded before it has been found to recover the cost. May we suggest that the specialised delegation on Friday could handle that subject better?

Shri M. R. Shervani: I am not very clear about the recovery of expenditure on research. Mr. Mackinnon said that the average expenditure was about two per cent of the turnover. That means that it is only a prosperous company which will spend money on research and earn a profit. When the expenditure is not more than 10 per cent of the profit from year to year, how do you still have 90 per cent profit to pay dividends, etc.? I do not quite understand this point that if there is no strong patent law, the money spent on research would not be recoverable. It is recovered from year to year out of profits. What have you to say about it?

Mr. C. A. Pitts: It is extremely difficult in the generality of cases to deal with the question as to how much is spent and how quickly it is recovered. Our contention in general is that

without strong patent law, the money will not be spent, and innovations and inventions will cease, as has been demonstrated in a country which in fact did away with patents in respect of drugs. As Mr. Mackinnon said earlier—he was talking of two per cent from his personal knowledge—in my personal knowledge, and this is in a sense confidential, the pharmaceutical division of ICI which has a most tremendous research establishment, did for many years together fail to make any money at all, and has made a recurring loss.

Shri M. K. Shervani: Excuse me if I put this question. Suppose there were no patent laws anywhere in the world, would the ICI stop doing research? Because, my point is, research is very necessary for your very existence. It is essential for you to continue to do research.

Mr. C. A. Pitts: Research would go on in selected areas where it is regarded as good commercial risk, but research would become secret and the results will go into the middle ages and they would be a great brake on the whole development of the entire world.

Shri M. R. Shervani: You would continue research for your own development, irrespective of whether you have protection or not.

Mr. C. A. Pitts: The research would then be very much more rigorously scrutinised and screened and done under conditions of extreme secrecy; the result would not be published; it will have a retrogressive effect on the whole academic system of the world.

Shri M. R. Shervani: You are giving advice in the interests of Indian industrial development. That is the basic idea. In your opinion, the present Bill would retard research and would be a disincentive to research. My question is, will it be better for a country which is at the bullock-cart stage to do research on

the basis of bullock-carts and cycles and then go to motor-cars, or, should that country take advantage of the existing discoveries of another country which is at the aeroplane stage, and take its help and assistance in developing the country's economy? You want us to give protection to our research scholars and scientists to do research, at the stage we are in, and not take advantage of the research done by other nations of the world?

Mr. C. A. Pitts: I would not treat the subject, so to speak, in that black and white way. I think the greatest asset of any country is the mind of the people and the brains and their creative ability. India does not lack creative ability of the highest order. This must be used in a sensible way. For example, I believe this country is extremely rich in raw materials which can be the base of drugs. This has been proved already and here I would say would be a case for some fundamental long-term research. This is one thing. Then, in another area, we have proved in my own group of companies the creativeness of India, that it can take the process which has been running for 30 years in Britain and make it more efficient, despite all the effort and expense and experience elsewhere in the task. When you bring modern technology to India, a great deal of research is required to adapt the processes to Indian conditions. There is scope for different kinds of research in India which can be profitable.

Shri M. R. Shervani: How long will it take for the Indians to advance to the level of their counterparts in the west?

Mr. C. A. Pitts: It would not be very long. Certain countries have been impressed by the quality of Indian research and they are trying to base some of their research effort in India. I do not think that is very far away. What is important is India should not seek to reprove what has

been proved elsewhere, but build on the foundations which already exist.

Shri M. R. Shervani: What is the ratio of foreign investment in industries manufacturing patented products compared to the investment in industries where there are no patents, say, during the last 5 or 10 years in India?

Mr. C. A. Pitts: I have no evidence about this and my opinion is highly subjective. I think the greater part of foreign investment in India has been in patented products and processes.

Shri M. R. Shervani: My information is that the ratio of investment in 10 years in patented products as compared to the investment in industries of products which are not patented is 1:10.

Mr. C. A. Pitts: I cannot argue it. But my personal experience in the chemical industry with which I am associated is that most of the investment has been in processes and products covered by patents.

Shri M. R. Shervani: My information is that investment made in India as a result of foreign collaboration agreements with Indian firms are much more where there is no patent involved than where there is a patent. So, industrial development does not entirely depend upon patents, but depends more on technical know-how. There is nothing in this Bill which forces anybody to give the technical know-how. The Indian industry will still have to pay for buying the technical know-how from foreign patentees.

Mr. C. A. Pitts: I have no statistics relating to this. But my personal experience in the chemical industry is that much of the investment has been in patented products.

Shri A. T. Sarma: In your memorandum you have said that if the Bill is passed the foreigners would not

invest their money in India. Do you substantiate it?

Mr. C. A. Pitts: Yes. The climate for investment would be impaired and the confidence of the investors would be badly shaken if the Bill is passed as it is.

Shri A. T. Sarma: Is it a fact that some foreign firms are being run by Indian experts and technicians?

Mr. C. A. Pitts: Yes; the foreign investors in India would like to train the Indians to run the plant as soon as possible.

Shri A. T. Sarma: Do you think India has to depend on foreign technicians and technology for some years or India can run its industries without foreign aid?

Mr. C. T. Pitts: Once an industry has been properly established, is properly managed and the staff properly trained, in my experience, it quite quickly gets on to the stage where Indian technicians can run it adequately. In the petro-chemical industry, for example, it will be necessary to import initially the technology and to get the Indians trained.

Shri V. M. Chordia: The Indian pharmaceutical producers came here and said that the present Patent Act is a hurdle to industrial development. They say, we are not in a position to invent and design new things. We have to imitate things and improve upon them. If there is a long period for patents, they are not in a position to imitate till the patent period expires. So, they say the period should be very small. In the first instance they say there should be no patent law, but if there is a patent law, the period should be small, so that they can imitate the drugs and sell them to the consumers at a cheap price. What is your view?

Mr. I. Mackinnon: The answer depends on whether we are talking

about a new invention or drug or about duplication of an existing drug covered by a patent. If we are talking about manufacture of existing drugs, the terms of compulsory licence provision suitably amended are adequate and it is not necessary to shorten the term of the patent. If we talk about new inventions, shorter the term of the patent, lesser are the chances of genuine research leading to new discoveries and longer the term of the patent greater are the chances of genuine research.

Shri V. M. Chordia: What is your experience about getting a patent sealed from the date of application? How long does it take? Is there any suggestion that the period may be reduced?

Mr. C. A. Pitts: We have no reliable information. We have only personal experience. Generally it takes a fair time. We cannot really answer the question adequately.

Shri V. M. Chordia: You must have studied the present Bill. In that some new provisions have been added about the period from the date of application to the date of sealing. Should there be any amendment, in your opinion, to this section so that the time may be reduced?

Mr. C. A. Pitts: It has been suggested that if it is India's wish to remain in harmony with the majority of the developed countries the simplest thing would be to conform with the convention, whatever it may be, whether it is the date of application or it is the date of sealing, established by other countries. The intention ought to be to reduce the time between application and sealing as much as possible.

Shri R. Ramanathan Chettiar: During the course of your evidence you prefaced your remarks saying that the Associated Chamber of Commerce and Industry represent Indian-based industries. May I, in

all humility, ask you what you mean by Indian-based industries?

Mr. C. A. Pitts: I mentioned in fact, Indian companies owned entirely by Indian shareholders with no foreign connections at all.

Shri R. Ramanathan Chettiar: The 2500 companies which you mentioned mostly represent foreign and, particularly, British interests.

Mr. C. A. Pitts: No, Sir, there is a strong element wholly of Indian business interests also.

Mr. A. B. Parikh: There are a large number of members of the Bombay Chamber of Commerce who are purely Indian-owned companies. Many of the companies of the Tata group and the Mahindra group are members of the Bombay Chamber of Commerce and they are also members of the Associated Chamber of Commerce. A large number of other companies which are not members of one group or the other are also members. So there are a number of companies that are not in the sense in which you use the term "anything but Indian-based". They are entirely Indian-based. I represent Voltas. Although we have non-Indian interests owning a certain part of the capital, that is only a very minor part.

Shri R. Ramanathan Chettiar: In your Memorandum you have almost indicated that you are not very much in favour of this legislation.

Mr. C. A. Pitts: We have said that the existing legislation has worked well and that the particular needs of the Government to ensure that certain products and processes are quickly made available to the Indian public and Indian economy can be taken care of by suitable modifications to the compulsory licensing system. In our view some of the other new clauses are not necessary.

Shri R. Ramanathan Chettiar: Are you aware that in UK it is more

rigorous than what is contemplated in our Bill?

Mr. C. A. Pitts: I think that is a matter of judgement. My sphere of responsibility is in India. I am not an authority on the British Patent Law. But I would not accept your fundamental assertion that the British law is much more rigorous. That is a matter of debate.

Shri R. Ramanathan Chettiar: You are not in favour of this provision relating to compulsory licence?

Mr. C. A. Pitts: I am in favour of compulsory licensing. I think it is a very necessary provision. I am not in favour of the so-called automatic licensing of rights.

Shri B. K. Das: Are you aware that several countries have got process patents only and not product patents?

Mr. C. A. Pitts: I think this question was raised previously that some countries have product patents, some have process patents and some have a combination of both.

Shri B. K. Das: We have introduced this with a view to encouraging research in our country. What have you to say about that?

Mr. C. A. Pitts: In the chemical industry proper, so to speak, the question of process patent is perfectly satisfactory. I am not an authority on this, but I believe that arguments in respect of other types of activity lay more emphasis on the product made.

Shri B. K. Das: For pharmaceutical industry you agree that this will be all right?

Mr. I. Mackinnon: So far a pharmaceutical industry, in particular, is concerned, I think that there can be no doubt that the protection granted by a product patent is far greater than that granted by a process pa-

tent. In many cases it is the product that matters and not the method of making it. The real invention consists of finding a drug for a particular thing in the human body, and how that drug is made is entirely a different matter. Its manufacture may be very simple and finding a substitute method of manufacture may also be a very simple process. But the process of discovery by testing the diverse compounds and the eventual discovery that this chemical compound will produce some dramatic results in a particular disease may be a very long and extremely costly process, both in the chemical laboratories, in the bio-chemical laboratories, in the testing of animals and human beings and all other kinds of testing that has to be done before a new product is put on the market. Therefore, the average drug manufacturer would ensure that his product is protected once he has discovered and proved by means of testing that it is safe and effective, rather than, having gone through all that and put the product on the market have someone else come along and make it by a relatively simple process and take away from him all possibilities he had of recouping his expenses. Nevertheless, I think it is fair to say that, speaking personally, and speaking for the Chamber and speaking for OPPI, and they will do it in a day or two, if for general reasons it were the decision of this Committee to retain the provision for a process patent only and not a product patent, there must be at least some provision that the burden of proof is on the infringer to show that the product is not made by the patented process. The burden should not be on the patent-holder to show that the infringer is using his process. The burden should be on the other party to show that they are not using the patented process. With that provision, the clause relating to process patent will have far less damaging effect on patents and research in general than the provision in its present form.

Shri B. K. Das: In some cases we have seen that the patentee takes patent for several processes but he exploits only one of them. Because of this, others are precluded from going in for other processes. Should this not be stopped?

Mr. I. Mackinnon: The reason is the one which I just gave. After spending a lot of money in the discovery and testing of the compounds and establishing that this is a useful drug, the manufacturer is not willing to see that his investment is dissipated by somebody else making it by some other process. Therefore, he attempts to protect himself against this by patenting all known processes for arriving at this product. I would submit that this happens only in some cases. It is not a very common thing to happen. It is a rare instance where a drug has taken a long time to develop and its chemical structure is extremely simple so that it can be manufactured by another relatively simple process. Since it is not a very common occurrence, I think we should not call this a very serious risk.

Shri B. K. Das: Suppose there is a provision that the burden of proof that a drug is manufactured by a process other than the patented process is on the infringer, then that would be sufficient?

Mr. I. Mackinnon: I think it would take care of most of the problems.

Shri Kashi Ram Gupta: The present Bill gives 14 years period from the date of completion of the specification while the former Act gives 16 years from the date of application. The time taken from the date of application to the date of completion of the specification may be 1 to 1½ years. As such, there is not much difference between the present Bill and the old Act, so far as this side of the patent is concerned. What is your opinion about this?

Mr. C. A. Pitts: Yes, Sir. The difference between 14 and 16 is, of 807 (B) L.S.—8.

course, not very great. The power to extend, I think, has disappeared altogether which, it seemed to us, might have been just and useful in certain circumstances. The impairment of confidence has been, so to speak, the application of this curtailment retrospectively to existing patents. The other point we were making was, as India is emerging as a more fully developed figure on the international scene, both in terms of trade and industry, it would pay India to stay instead with the majority of countries in their general patent legislation. If, for example, the convention was 15 years from the date of sealing, that would be a sensible thing to do. If it is 16 years from the date of application, it would be sensible to follow it. But the difference between 14 and 16 is not significant.

Shri Kashi Ram Gupta: May I draw your attention to page 49 of the Model Law for Developing Countries in which it is stated that the minimum period can be 10 years from the date of grant of patent?

Mr. C. A. Pitts: Well, I have no comments on that.

Shri Kashi Ram Gupta: So far as 14 years from the date of specification and 16 years from the date of application are concerned, you have no grounds to differ?

Mr. C. A. Pitts: I do not think the point is very material.

Shri Kashi Ram Gupta: You have laid stress that we should go on the lines of other countries. The model law points out two kinds of patents— from the date of application or completion of specification and the other from the date of grant of patent. Which do you prefer?

Mr. C. A. Pitts: If the gap between applying and sealing is not very large, I would suggest that the point is immaterial. The Indian law

should lie alongside the laws of the major countries with whom she does trade in patented goods and technical information. I do not think it is particularly significant which one you choose because it means the same.

Shri Kashi Ram Gupta: What is the time taken in India between the date of application and the date of grant of patent?

Mr. I. Mackinnon: I am afraid, I do not wish to answer about the actual fact at the moment. But what I wish to say is, and it seems relevant, since no patents have been sealed in some fields for quite a long period of time, whatever the period has been between the date of application and date of sealing in the past, it is bound to be a great deal longer in the future until the backlog has been caught up, and I hope that the Members will take that into account in deciding what the period is likely to be.

Shri Kashi Ram Gupta: You have mentioned that 2 per cent of the output is spent on research. May I know whether this is spent on applied and product research or on basic research also?

Mr. C. A. Pitts: I think the reply that we gave was a very limited one based on limited experience. I would submit that a more detailed reply could be given after full investigation. It will not be a reliable answer to say off the cuffs, so to speak, how much is true research and how much is applied research and how much is development.

Shri Kashi Ram Gupta: My point is whether basic research has been started by these industries.

Mr. C. A. Pitts: Basic research has been started certainly in the chemical industry.

Shri Kashi Ram Gupta: In the pharmaceutical industry also?

Mr. C. A. Pitts: Yes.

Shri Kashi Ram Gupta: Which are the main companies that have started it excepting the CIBA?

Mr. C. A. Pitts: My own company has started it recently. I am afraid I am not able to answer for all the members of the Associated Chambers.

Shri Kashi Ram Gupta: It has been given out that generally a medicine goes out of use within a period of 10 years. Do you agree with this?

Mr. I. Mackinnon: I am afraid I cannot subscribe to that view. There are many medicines in the market that are still having good value for the last 50 years. On the other hand, a medicine might go out of use within six months if somebody invents anything better. I do not think it is possible to give an average life of a medicine like that which will mean anything worthwhile.

Shri Kashi Ram Gupta: Are you aware of the fact that your own OPPI members have mentioned that in their memorandum?

Mr. C. A. Pitts: I don't know.

Shri Kashi Ram Gupta: If you read it, you will find it there.

Now, my last question is this. You have said that you will be able to have exports from this country if the present Bill is not put in its present form and that the old Act should be there. But at the same time, you say that the cost of production in India is very high as compared to that of other countries. How can it be possible to have exports from this country?

Mr. C. A. Pitts: I think it is a fact that exports are being made out of India at any price in order to earn foreign exchange. Export effort has, in fact, very little to do with the cost of production. Exports have been allowed at prices well below the cost of production.

Shri Kashi Ram Gupta: How can the patent law help in that?

Mr. C. A. Pitts: The point I was trying to make was that if you have a product which is patented, say, for 15 years in Britain and it is made in India outside of patent, then you would have difficulty in exporting that product to Britain. This was the argument for making the Indian patent law in step with that of other countries with whom she wishes to have the trade.

Shri K. K. Warrior: You have made out a case for the manufacturers to protect their rights well. Then, there is the other side also, that is, the interest of the consumers. For instance, there is a product which is protected by the patent law. Now, there are new processes which are coming up in India. Why should you bar the consumers from having the cheaper products which can be manufactured here? It is the patent of the product which is coming in the way. How can the interests of the consumers be protected?

Mr. Chairman: He has answered about that.

Shri K. K. Warrior: The new processes are coming up, as many as 10 or even 12.....

Mr. Chairman: They have answered that.

Mr. C. A. Pitts: We endorse the existence of the provisions of compulsory licensing. If there is a product or a process which is beneficial to the people of India and which is not being exploited by the owner, then it is right and proper that a compulsory licensing should be resorted to to compel production of that product.

Shri K. K. Warrior: There is the compulsory licensing provision. But at the same time there are so many litigations going on. When a new process is put into manufacture,

that is barred by the court. Now, so many litigation cases are coming up even though the provision of compulsory licensing is there. How to avoid all this?

Mr. C. A. Pitts: I think that is a fact. The provision of compulsory licensing seems to be little used.

Shri K. K. Warrior: Then, you take exception to clause 48. But in the U.K. Act also there is such a provision under section 46 which allows use of patented inventions for the services of the Crown. It says:

“Notwithstanding anything in this Act, any Government Department and any person authorised in writing by a Government Department may make use and exercise any patented invention for the services of the Crown in accordance with the following provisions of this Section.”

What is the difference that you make out?

Mr. I. Mackinnon: As I understand it, the U.K. Act deals specifically with the use for the purpose of the Crown. This clause does not restrict it for the use of the Government.

Mr. Chairman: That is specified there.

Mr. I. Mackinnon: It is not specified in this particular clause. The clause, as it is, is unlimited.

Mr. Chairman: You may please see Section 102 read with Section 48.

Mr. I. Mackinnon: There is no limitation in clause 48. Clause 48 is very much wider. May I also point out that the U.K. Act provides for compensation to the patent-holder.

Mr. Chairman: It is provided:

“(b) the importation by or on behalf of the Government of any patented medicine or drug for the purpose merely of its own

use or for distribution in any dispensary, hospital or other medical institution maintained by or on behalf of the Government or any other dispensary, hospital or other medical institution which may be specified by the Central Government in this behalf...."

Mr. I. Mackinnon: It says, any dispensary, hospital and all that.

Shri K. K. Warrior: The U.K. Act actually takes more powers than what is provided in this clause. Sub-section (6) of Section 46 of the U.K. Act says:

"For the purposes of this and the next following Section, any use of an invention for the supply to the Government of any country outside the United Kingdom in pursuance of any agreement or arrangement between His Majesty's Government in the United Kingdom and the Government of that country, of articles required for the defence of that country shall be deemed to be a use of the invention for the services of the Crown; and the power of a Government Department or a person authorised by a Government Department under this section to make, use and exercise an invention shall include power to sell such articles to the Government of any country in pursuance of any such agreement or arrangement as aforesaid....."

Mr. I. Mackinnon: It is a matter of interpretation whether it is wide or not. My impression is that the U.K. Act specifies clearly whereas Clause 48 of the present Bill does not specify clearly.

Mr. Chairman: I read Clause 48.

Mr. I. Mackinnon: That seems to be much wider in its possible application than the U.K. Act.

Mr. C. A. Pitts: It is not that we are defending the British Act.

Mr. Chairman: U.K. is a highly advanced country and what is good for U.K. should be good to us also.

Shri R. Ramanathan Chettiar: The 1911 Act is based on the Act of U.K. Mr. Mackinnon has said that the U.K. Act is more specific whereas the provisions in the Indian Bill, Clause 48, are wider. May I point out to Mr. Mackinnon one sentence which specifically states that "the Government of U.K. can sell to any government or any country". That is not found in our Bill.

Mr. I. Mackinnon: Under a specific treaty obligation.

Mr. Chairman: I may tell you that all clauses beyond 102 are copies of the U.K. Act. There is nothing new.

Shri M. R. Shervani: In the U.K. Act, is compensation provided or not?

Mr. Chairman: The power is there. But we have not provided compensation.

Shri K. V. Venkatachalam: I want to ask you a question in the pharmaceutical field. It has been represented before us by other witnesses that the development in the pharmaceutical industry such as has been during the last five or six years has been mainly in production in the penultimate stage, i.e., just in the formulation or just one or two steps lower than the final product. Can you give your assessment of this situation?

Mr. C. A. Pitts: This, in fact, must be so in a country which has before it the long road towards industrial self sufficiency. Some of the intermediates required in the chemical and pharmaceutical industries are

highly sophisticated to go back to the root raw material and to do it on a small scale would make costs prohibitive. Therefore, the general pattern in the sophisticated industries is to start near the end product and gradually go back towards the root raw material. One of the disappointing things in India has been the somewhat slow development of the organic chemical industry—we do not want to discuss the reasons for that here—and it has slowed down the speed with which the pharmaceutical manufacturers can proceed backwards to the root material.

Shri K. V. Venkatachalam: Will it take too long to go forward in a significant way?

Mr. C. A. Pitts: Much depends on the government policy; for example, the speed with which the Hindustan organic project gets off the ground; this is going to manufacture some of the basic organic intermediates.

Mr. Chairman: You told us that the Government has made a difference in respect of the term of the patent, between pharmaceutical drugs and other inventions, namely, 10 years and 14 years. Many countries have made this difference especially the countries which are developing fast technologically like the United States, Canada, New Zealand and South Africa. They have set up special committees and they are making this difference. Canada suggested abolition of drug patents. In the United States it was contended that three years would be an ample period to recover research outlays and then there is the maximum royalty of 8 per cent for unrestricted licence; that includes grant of all technical information required in sale and manufacture. The Simon Committee in South Africa suggested five years for drug patents. This is the case in advanced countries. Why should you then object if the Government of India make this difference between pharmaceutical and other inventions.

Mr. C. A. Pitts: Those people whose responsibility it is to govern the country should be conscious of the need for drugs to be made available as quickly as possible and at as low a price as possible to the people of that country. It is really a question of finding what is, so to speak, the right compromise. One should consider the various aspects. The drug manufacturers should not, in fact, be terribly so rushing with their development that they would put a drug on the market before they are absolutely sure that it is safe. Also if the procedure which will cause seven years to elapse before a drug really comes to be commercially exploited is accepted, he will have only three years left to get his money back and prices would be extremely high. This will not be beneficial to the consumer.

Mr. Chairman: I want to read out a quotation from "Amendment of British Patent Law" by the Chartered Institute of Patent Agents:

"Nevertheless, the possibility may be conceived of a new food, medicine or device, being of such vital importance to public health that there should be as little delay as possible in meeting every demand for it. This could be covered if Section 41 were repealed, by providing in Section 37, as suggested by the Institute to the Swan Committee, that an application for a compulsory licence under a patent for such a product could be made at any time after the grant of a patent, and would be granted before the expiry of the three years if, but only if, overwhelming public interest were proved."

In cases of emergencies like an epidemic when the demands of the public are not met, why should not the Government have the powers to see that the necessary drug is supplied to the people of India at a reasonable price?

Mr. C. A. Pitts: Such a situation could be taken care of by a modifi-

cation of the compulsory licensing provisions.

Where the product is of such vital importance to the country, then some provision could be laid down that, subject to there being satisfactory evidence, a compulsory licence could be issued. This, I think, is a reasonable proposition.

Mr. Chairman: Do you think that the Patent Controller will issue licences of right?

Mr. I. Mackinnon: Licence of right is not issued by the Controller. Licence of right is applied for to the patent holder by the applicant and all that the Controller is to do is to settle the terms.

Mr. C. A. Pitts: Compulsory licensing provisions could be modified to provide for such situations without introducing the complications of licence of right.

Mr. Chairman: It is only to meet such situations that licence of right is included.

Mr. C. A. Pitts: Automatic licence of right would not bring in compensation.

Mr. Chairman: We will certainly expect the Controller of Patents to go into it. He has got the knowhow and wherewithal.

Mr. C. A. Pitts: In the Bill it is not left with the Controller. Anyone can have a licence of right. Controller is only to settle the terms and disputes. The better device would be to modify compulsory licence provision wherein the Central Government can take initiative.

Shri M. R. Shervani: Controller comes in to settle the terms and it is for the controller to say that this firm is not qualified or impose suitable terms.

Shri C. A. Pitts: Under the Bill anyone can have such a licence. If the terms are in dispute it is for the Controller to settle them.

Shri M. R. Shervani: We want to know from the officers concerned if what Mr. Pitts said is the correct position.

Mr. Chairman: We will find out.

Shri C. A. Pitts: May I read clause 88 of the Bill?

Where a patent has been endorsed with the words "Licences of right", any person who is interested in working the patented invention in India may require the patentee to grant him a licence for the purpose on such terms as may be mutually agreed upon.

Shri R. Ramanathan Chettiar: You know the prices of life-saving drugs in this country are very high compared to the prices charged in other countries. Here I would like to elaborate on one point. A few years ago Haffkin Institute of Bombay made some research and brought out Tolbutamide at one-fourth of the price charged by Hoecht. Hoecht people objected to Haffkin doing it and now the matter is before the Court. The object of the Bill is to bring down the cost of life-saving drugs. But, we are prevented from doing this and that is why this provision is also put in here. Are you in agreement with us that we should bring down the price of life-saving drugs in this country?

Mr. C. A. Pitts: Indeed.

Shri R. Ramanathan Chettiar: But the Hoecht people prevented Haffkin Institute from doing it.

Shri C. A. Pitts: By a process which Hoecht has patented and on which Hoecht has spent a lot of money, Anyway, the matter is

sub-judice and it is not therefore a subject on which I should comment at all.

Mr. Chairman: Thank you.

(The witnesses then withdrew).

III Bengal Chemists and Druggists Association, Calcutta.

Spokesmen:

1. Shri P. K. Guha
2. Shri T. K. Ghosh

(The witnesses were called in and they took their seats)

Mr. Chairman: We have received your memorandum. Whatever evidence you give here will be printed, published and distributed to Members and laid on the Table of the House. Even if you want any portion to be confidential, it will be printed and distributed to members. Your memorandum has been circulated. If you want to add anything more to it or stress any particular point, you can do so. After that, members will put question which you may answer.

Shri P. K. Guha: If anything crops up in the course of discussion, we will explain it. Otherwise, we will more or less limit our submission to the memorandum.

Shri V. M. Chordia: You are in favour of abrogating the present law?

Shri P. K. Guha: Yes.

Shri V. M. Chordia: How do you suggest that the person should get incentive for research?

Shri P. K. Guha: What research—basic research?

Shri V. M. Chordia: Basic research and other researches. If you have different opinions on different types of research, please give them.

Shri P. K. Guha: We submit that everywhere in the world basic research are mainly sponsored by Government. But, as far as we, in India, are concerned, we have not so far contributed anything in the basic research. What we understand here is the commercial research. This is also called development research and if any incentive is to be given, that should not be on the basis of development research. Our submissions therefore are that it should be on the basis of basic endeavour. There should be zeal and initiative amongst the industrialists in India and no patent protection is necessary in the development of such zeal. We do not feel that any protection is necessary to give an incentive for development of the results of basic research.

Shri V. M. Chordia: Don't you agree to this that if a person starts from the beginning, after five years or ten years' experiment only, he gets a product. Whereas another person who sees the product, just imitates it. He has no work but has simply to imitate that. In that case, should not the person who has spent five years or so on this also get some protection?

Shri P. K. Guha: As far as pharmaceutical industry is concerned, development research is carried out from the point of applied research and basic research. That is the point to be thought of. As far as pharmaceutical industry is concerned, in our country, if it makes any improvement, that is from nucleus of basic research or applied research. If you think of protection to be given to somebody who is carrying out basic research, we don't mind for that. If protection is to be given to a person who has invented something from the organic stage, that is quite different. Take for example Penicillin. The organic compound came out from Alexander Fleming. If he is claiming the patent for it, you better think over the matter.

Shri K. K. Warrior: We find that even among the pharmaceutical industries, some are now having new processes from out of lapsed ones. Should we not think that some protection should be given to the new processes which are giving to the consumers such materials at lesser prices?

Shri P. K. Guha: Is it a question of process for rivalry?

Shri K. K. Warrior: I shall give you a concrete instance. Take for example the most commonly used aspirin. A new process has been found out by somebody. That gives cheap material and cheaper aspirin to the consumers. Don't you think that that must be protected by a patent?

Shri P. K. Guha: Certainly not. First of all, the original process of aspirin invented by Bayers is also covering several processes and there is improvement on them. It is an improvement in the technology and the method of production. If the Patent Law is contemplated, I don't think that it will also give protection to the technological improvement made. As far as full specification is concerned, technology helps. How such an improvement for increasing the production can be covered by protection depends on how much an industrialist can produce that. If there is a larger production, it will be cheaper in the market. This is my contention.

Shri K. K. Warrior: At present our chemical industries are just starting and we visualise that this industry will develop very soon. There are many possibilities for our scientists and technologists to introduce very many new things, new formulae and new compounds and new production. Now, don't you think that some encouragement should be given to those people in the form of protection which will give them some incentives also?

Shri P. K. Guha: What I want to submit is this. Right from the start of the independence, our pharmaceutical industry produced goods worth Rs. 12 crores. Now we are in the stage of producing Rs. 175 crores worth of stores. If that is so, let us have a test. We have given the opportunities of exclusive patents since 1911 and we have given the opportunities after that also with certain amendments. Anybody can go to the Patent Controller and say that this has not been exploited in full and that we can improve upon it. The patentee is not taking enough steps to produce in full and according to our necessities. We have certain provisions in the existing law. These served no remedy. If we want that our research workers, chemists and scientists should be given the protection, well, it is worthwhile to think over it. But, my submission is that we should try to do it on the basis of a test of going without patents for a couple of years. So far, we do not have any papers where we can see that a large number of inventions have come out from our research workers or scientists. Scope has got to be improved.

Shri K. K. Warrior: In view of development of Petro-chemicals, new petrochemical complexes are coming in. There are so many of them. Don't you think that this will give sufficient scope for our research scientists also to make new inventions and should not that invention be protected from the encroachments of foreigners who still exploit that? There are so many instances like that. Take for example Suri gadgets. Should that not be protected by patent law?

Shri P. K. Guha: Protection should be at the basic stage. If it is from the basic stage, we don't object. That is what we envisage.

Shri K. K. Warrior: What do you mean by basic research? Take the concrete instance of Suri gadgets. Wherefrom is the basis taken? Gad-

get is already there; he has made new inventions but the West German people are exploiting that. Where does the basic thing begin?

Shri P. K. Guha: I quite understand that the West Germans are exploiting it. Whether it is our people or anybody else, it is the interests of the consumers, that is to be seen and we can understand the feeling of the consumers too.

Mr. Chairman: How are you going to protect the Indian scientists who have found out the method of manufacturing a new drug?

Shri P. K. Guha: I submit that as far as pharmaceutical industry is concerned, new invention is necessary. At the same time, there should be market for its utility in our country.

Mr. Chairman: It is not a question of finding a market. Here, how are you going to protect the improvement made by a scientist by his labour? Unless there is a patent, any man can come and exploit that process.

Shri P. K. Guha: If there is a competitor we should not have any objection. However, somebody has come with a research, with a new invention and simultaneously there is another one from the foreigners....

Mr. Chairman: You have not understood me. You perfect a process for the manufacture of a drug. You do not want any patent on it. Suppose I come and exploit that and begin to manufacture that drug and earn money. How are you going to protect your interest? You have no objection to it.

Shri P. K. Guha: I have no objection there. I tell you our intention is to reduce the prices, in the interests of the consumer. The protection is already there and we have seen the results of that protection.

We feel that we are exploited too much.

Mr. Chairman: So you do not want any patent.

Shri K. V. Venkatachalam: What is the total membership of the Bengal Chemists and Drugists Association?

Shri P. K. Guha: About 1500.

Shri K. V. Venkatachalam: Who are they?

Shri P. K. Guha: We have manufacturers; we have wholesale and retail chemists.

Mr. Chairman: Are there any manufacturers also in your Association?

Shri P. K. Guha: Yes, there are 5.

Shri K. V. Venkatachalam: Against a total membership of?

Shri P. K. Guha: About 1500.

Mr. Chairman: Which are these five firms?

Shri P. K. Guha: Bengal Chemicals, Bengal Immunity, Dey's Medical Stores....

Mr. Chairman: The views that you have put forward before us represent the views of these firms—Bengal Chemicals, Bengal Immunity etc?

Shri P. K. Guha: These are the views of our Association.

Mr. Chairman: Do these five drug manufacturers agree with your views?

Shri P. K. Guha: Individually we have not taken the views but this memorandum was circulated to our members and if they had any objection, they would have intimated to us.

Shri K. V. Venkatachalam: You have been overwhelmingly representing the traders?

Shri P. K. Guha: Yes.

Mr. Chairman: All these five are pharmaceutical industries?

Shri P. K. Guha: Yes.

Mr. Chairman: Which are the two others?

Shri P. K. Guha: The other two are—EIP Pharmaceuticals which you very kindly visited and another is Dolphin Laboratories.

Mr. Chairman: Thank you very much.

(The witnesses then withdrew).

(The Committee then adjourned)

**Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965.**

Wednesday, the 13th July, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—Chairman

MEMBERS

Lok Sabha

2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Bibhuti Mishra.
7. Shri P. C. Borooah.
8. Sardar Daljit Singh.
9. Shri Basanta Kumar Das.
10. Shri V. B. Gandhi.
11. Shri Kashi Ram Gupta.
12. Shri Madhavrao Laxmanrao Jadhav.
13. Shri Mathew Maniyangadan.
14. Shri Braj Behari Mehrotra.
15. Shri Bibudhendra Mishra.
16. Shrimati Sharda Mukerjee.
17. Shri Chhotubhai M. Patel.
18. Shri Naval Prabhakar.
19. Shri R. Ramanathan Chettiar.
20. Shri A. T. Sarma.
21. Dr. C. B. Singh.
22. Shri K. K. Warior.
23. Shri Balkrishna Wasnik.

Rajya Sabha

24. Shri Arjun Arora.
25. Shri Vimalkumar M. Chormale.
26. Shri P. K. Kumaran.
27. Shri Shyamnandan Mishra.
28. Shri Mulka Govinda Reddy.

29. Shri M. R. Shervani.
30. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

- I. Shri T. Durairajan, *Dollar Company, Madras.*
- II. *Pharmaceutical Manufacturers' Organisation, Ahmedabad.*

Spokesmen:

1. Shri Hasmukhlal C. Shah.
2. Shri I. A. Modi.

- III. *Gujarat Vepari Mahamandal, Ahmedabad.*

Spokesmen:

1. Shri Charandas Haridass, *Vice-President.*
 2. Shri Chandulal Premchand, *Ex-President.*
 3. Shri J. T. Trivedi.
-

1. Shri T. Durairajan, The Dollar Company, Madras.

(The witness was called in and he took his seat).

Mr. Chairman: The evidence given by you is public and will be published and laid on the Table of the House. Even if you want any portion of it to be confidential, that also will be printed and distributed to Members of Parliament. **We have received your memorandum.** It has been circulated to all the members. If you want to add any new points or stress anything, you may do so. After that, members will ask you questions.

Shri T. Durairajan: The first question is whether patent protection of drugs is necessary on human grounds, because whatever protection is given, it is only with regard to having a monopoly with regard to the price structure. In a country like ours where economic standards are so low, can we really afford the prices fixed by firms who patent the drugs? Very often we are told that large sums of money are being spent on research. This expenditure is being written off, so that actually the Government contributes a major portion of the research expenditure. The only thing is part of it might be given as dividend to shareholders and that amount comes from people who have invested the capital. Even in regard to items where no patents are involved, the manufacturers have a research department to find out economic ways of manufacturing the products.

The tetracycline patent expired in U.K. recently. The ICI immediately announced that they are making arrangements to manufacture the drug in U.K. and to sell it at a price much lower than the price at which Pfizers were selling it before. Pfizers filed a suit in the House of Lords for patent infringement, but it was decided against Pfizers. The question of royalty to be paid is still not settled. I just mentioned this to show how after the patent expired, a private firm has come forward to manufacture it at a lower price.

I have made a survey of prices of patented drugs in the past ten years. Only when these drugs started coming from Italy or other rupee-payment countries that the firms holding patents in India started reducing the prices. They did not do it on their own although they have been able to recover more than what they had spent. Only when there is competition, they agree to lower the prices. Vitamin B-12 is an example.

We are told that patents will stimulate transfer of technology. Is it so? In India factories are set up on turn-key basis and everything is brought from outside. If something goes wrong or if the factory is blown up, I do not think the Indian scientific personnel in charge of the factory would be able to erect it again and start production.

There is provision for compulsory licensing. The firm holding patents might allow one or two other firms to manufacture the product by agreement and still keep up the price. There may not be any need for compulsory licence or for the Controller even to consider the application. Perhaps a provision can be made in the Bill that if the patentee works the patent to the detriment of the country, Government will immediately take action in the interests of the country. The other thing is compulsory licensing without technical know-how. What is given in the patent specification is just a basic structure. With the patent specification alone I am not sure whether it will be possible to manufacture the product. The question is whether we can compel a patentee to give the know-how. Unless the know-how blueprints or drawings are given, I do not think it will be possible to manufacture the product in the country.

The amount spent on medical propaganda is much more than what is spent on research. Taking a country like ours, each individual firm spends, I think, Rs. 20 lakhs to Rs. 30 lakhs on medical representatives. A medical representative costs Rs. 10,000 to Rs. 15,000 per annum. Each firm has

200 to 300 medical representatives and they spend Rs. 20 lakhs to Rs. 30 lakhs on medical propaganda. I do not think a fraction of that amount is spent on research. Conversely, even if you take up a country like the United States of America. I think in the year that I am referring to, 450 million dollars were spent on medical propaganda and 400 million dollars on research. Therefore, the amount spent on medical propaganda to popularise drugs in the medical profession is perhaps much more than what they are spending on research.

Since submitting my memorandum I had occasion to read the criticisms appearing in the Press with regard to this Patent Bill and I have had discussions with various persons who are interested in manufacture. What these firms are concerned, in my opinion, is not as to how it will affect their business in India. What they fear is, under-developed countries like Burma, Ceylon, Malaya and the middle-east African countries, who may not acknowledge us as their political Guru, once they find that this Patent Bill is passed by us, they will immediately bring in a similar legislation in their countries. What they are afraid of is, therefore the amount of money they are now able to receive from these countries by way of exports would perhaps come down. That is one of the reasons why this Bill is being opposed.

Mr. Chairman: May I take it that you are in agreement with the provisions of this Bill?

Shri T. Durairajan: Yes.

Shri R. P. Simha: May we know something about the witness, what is this Dollar Company etc.?

Shri T. Durairajan: Dollar Company is a partnership form consisting of myself and my younger brother. We have been importing drugs in bulk and selling them either to the Government or to wholesalers in India during the past two decades. From 1960 onwards we are manufacturing

a product called **Hedensa**, a medicine for piles. It is a German product, formulated by a pharmacist who is still alive. It has been exported from Berlin for the past 50 years. Because of import restrictions the Dollar Company has acquired the trade mark rights for it just as we buy ownership of flats. The Dollar Company owns the trade mark in India for Hedensa and also Lichensa of an identical formula with a slight change used for skin troubles and sold all over India. The total requirements of the country can be met with thirty working days of our factory. Therefore, in order to keep the staff employed we are making tablets and selling them mainly to the Government or to the army.

Dr. C. B. Singh: This memorandum is well documented. It has been guided by the one main principle which speaks about your own background. The two basic facts which have brought about this memorandum are: the price part of these drugs in the country and the cases which have been going on for infringement of patent rights. You have mentioned about Kefauver Committee report. Senator Kefauver was of the opinion that patents were primarily responsible for high costs of drugs. Do you know what was the result or the ultimate end of that report? What happened in U.S.A. Parliament after this report?

Shri T. Durairajan: I do not know what was the result. The Patent Act is still there in the United States.

Dr. C. B. Singh: The result was two very modifications to the Patent Act. Senator Roman Hux, a member of the sub-committee said: "It has been my judgment that the hearing so far has been prejudiced and distorted, they have lacked balance, they are unfair to the industry and to the Government agency, the Senate itself and to the public". This report has gone on in this country. People have taken one part from there and one part from here and given a distorted

picture of the whole thing. This report has been responsible for a lot of misunderstanding.

You have mentioned that you are trying to give life-saving drugs at reasonable prices to the public. Don't you think that the Government has sufficient powers to regulate the prices, import any amount they want, cut down imports if necessary, cut down the percentage of foreign exchange and do anything they like to regulate the prices? If even with all that the prices have not come down, it is not the fault of the patent, it may be that somebody in the Ministry is responsible for it. What have you to say about it?

Shri T. Durairajan: All that I would submit is that there is not that much coordination between the Patent Office and the Ministry. The Controller of Patents has very little to do with the prices. I do not know whether it will be possible every time for the Controller to examine the prices and then report to the Ministry.

Dr. C. B. Singh: You have been all the time importing raw materials, packing them and distributing them. Have you a research unit?

Shri T. Durairajan: No, not until today.

Dr. C. B. Singh: You will agree that with our mixed economy, where we want to compete in the world market, we have got to produce things of our own. Do you think that we still want to import things and not produce some of our own new drugs in this country?

Shri T. Durairajan: We have got to do it as early as possible, but the difficulty is that we are still not able to produce one basic drug in this country.

Dr. C. B. Singh: In your memorandum you have mentioned two important drugs. Do you know that

Pimpri have asked for a royalty of 7½ per cent on one of their drugs when our Bill provides only 4 per cent. Anyhow, that is besides the point. You agree that research is very important and hardly anything is being done in this country.

Shri T. Durairajan: That is correct.

Dr. C. B. Singh: We are doing something in the national laboratories, in the Central Drug Research Institute and in the universities. What should be done so that there will be more of research in this country?

Shri T. Durairajan: Until we are able to set up manufacturing units of our own, I do not think we can really make any progress with regard to research.

Dr. C. B. Singh: The CDRI, Lucknow has been functioning for the last 15 years and its annual budget is Rs. 30 lakhs. It has not been able to produce any good results so far. What is the reason?

Shri T. Durairajan: I am not competent to make any comments on an institution like that. Individual scientists should take personal interest in their work. Obviously, it is not a co-ordinated effort which they are making. That is my impression. I was there when Dr. Mukerji was there.

Dr. C. B. Singh: What improvements would you suggest in the set up or working there?

Shri T. Durairajan: Each individual scientist has to take personal interest in the work. I cannot suggest what each scientist should do to find out new drugs.

Dr. C. B. Singh: You are more or less against foreign capital in this country?

Shri T. Durairajan: I have not said that.

Dr. C. B. Singh: Anyway, you have said that they are taking away a lot of money from this country.

Shri T. Durairajan: That is correct.

Dr. C. B. Singh: Since we have a mixed economy, should not foreign investment be encouraged for faster development?

Shri T. Durairajan: That is correct.

Dr. C. B. Singh: You have mentioned that Germany and Japan have strong patents. Do you know that foreigners are earning a large amount as royalty from patents in Japan and Germany?

Shri T. Durairajan: The only submission I would make is that in relation to the royalties going out, they probably get much more as their share.

Shri C. B. Singh: No, that is not true. Japan is paying more than what it is getting.

Shri T. Durairajan: If we take into account only the question of royalties that they are paying and receiving, you are perfectly correct. But, in comparison with the royalties that they are paying for manufacture, the exports that they are making in respect of those drugs and the money that comes into the country—it does not matter whether it comes in the form of royalties or goods exported—is certainly many times more.

Dr. C. B. Singh: You have stated that these two countries have a large number of patents.

Shri T. Durairajan: I have submitted that in Germany and Japan the patent is for the process and not for the product. We are now trying to give patent to the process and not to the product.

Dr. C. B. Singh: In the European Common Market things are going to be modified slowly.

Shri T. Durairajan: Switzerland and Germany are still sticking to process patent. I do not know whether those countries are going to revise their laws to have product patent *per se*.

Dr. C. B. Singh: USA has product patent. There are three types of patents—process, product and both process and product.

Shri T. Durairajan: I want patent for process alone.

Dr. C. B. Singh: You have not mentioned anything about appeal. We feel that the appeal should lie to the Government. Do you agree?

Shri T. Durairajan: No, it should be to a judicial body.

Dr. C. B. Singh: Then there will be the difficulty of delay. Do you think that the delay will be minimised by having a judicial tribunal?

Shri T. Durairajan: I was not thinking in terms of delay. I was thinking in terms of what is fair. We have got to be not only fair but appear to be fair.

Dr. C. B. Singh: Would you like to fix some time limit?

Shri T. Durairajan: That would be only on paper. With due respect, supposing we fix a time limit. How could we enforce it?

Shri M. L. Jadhav: Do you agree to the term of patents for ten years?

Shri T. Durairajan: If necessary, it can be extended by three or four years.

Shri M. L. Jadhav: It is said that the price of drugs manufactured in India is very high. Can you make some suggestions for bringing down those prices?

Shri T. Durairajan: If the hon Member is having in mind the ques-

tion of the price of the imported drug as related to the drug that is manufactured in India, it will take years before we can come up to that level, because the manufacturer here has to pay a high price for his raw materials. Unless he is able to obtain them at reasonable prices, how can the price go down?

Shri M. L. Jadhav: Are you aware that some of the imported drugs are sold by private firms here at a price higher than the price charged by the Government for the same products?

Shri T. Durairajan: It is a question of supply and demand.

Shri M. L. Jadhav: I am talking of sulpha drugs. The private firms are charging double the price charged by Government.

Shri T. Durairajan: That is inherent in human nature. The price of sulpha drugs today is 30 to 40 per cent less as compared to some time back because Government have announced a liberal import policy. When there is short supply in the market, the trader wants to have a larger margin. It applies not only to drugs but to other commodities also.

Shri M. R. Shervani: I take it that you support the Bill as a whole. Have you any objection to clause 96 about judicial tribunal not being there? Do you think it is necessary?

Mr. Chairman: He has earlier answered that question.

Shri Arjun Arora: It is mentioned in the American Senate Report that when a representative of Pfizer was asked of the secret of their higher rate of profits in the foreign markets, as compared to the domestic market, he did not give any reply by simply saying that it is a trade secret. With your experience perhaps you know what that secret is.

Shri T. Durairajan: Even if it is a secret, I am willing to place it before

the Committee. The Secret is this. Let us take oxytetracycline for which the price fixed by Pfizer in United States is 10 dollars for a phial. The retailer's margin is 25 to 35 per cent. The margin between the middleman and the wholesaler is 15 to 20 per cent. So, the net amount that comes to Pfizer Company when a phial is sold for 10 dollars is hardly 3.5 dollars to 4 dollars. But when they export the same drug to India, they base their price on what they can get from this country. It is not a question of what is their actual manufacturing cost plus profit. When they export these drugs to the under-developed countries they charge a price which that market can afford to pay. So, the whole money comes to them in the form of export prices on which they very have little expenditure because the expenditure they have to incur on agents etc. is met from the profit that is being made in this country. So, they make a larger profit on their exports, as related to the net profit, than they get in their own home country. The cost of retailing and administrative expenses in their country are also high.

Shri Arjun Arora: Am I to understand that they are charging these abnormally high prices because they have patents in the importing countries?

Shri T. Durairajan: Yes, Sir.

Shri Arjun Arora: You have mentioned in your memorandum about foreign manufacturing firms in India getting their substances or intermediates from their parent companies for prices far excess of their ruling prices in those countries and you have stated that the reason is obvious. Unfortunately, it is not so obvious to me.

Shri T. Durairajan: The companies operating in India are small subsidiaries which were started with a small capital. They are not interested in the subsidiary company making a larger profit because a major portion of that will be taken as tax in this

country. So, to the extent they are able to charge a higher price, they are able to receive the money in foreign exchange in their own country, which is advantageous to them, because it is free of Indian or Ceylonese income-tax. I may even add that they send them as consignments on account and invoice them after ascertaining the price which can be realised. If they find that a higher price can be realised, they will invoice at a higher price.

Shri Arjun Arora: Am I to understand that this country has to pay a higher price than the one prevailing in the country from which we are importing the drug?

Shri T. Durairajan: Not only higher than the price prevailing in the importing country but in some other countries also. Hong Kong has a free market. A firm in UK charges 15 shillings a kilo for a drug while selling to Hong Kong whereas we in India pay more than double that amount. So, a number of firms are importing drugs from Hong Kong at half the prices which the British manufacturers or their agents here are quoting.

Shri V. M. Chordia: What is the price of Hadensa in Germany and in India?

Shri T. Durairajan: The cost of manufacturing Hadensa in Germany is far lower than in India for two reasons. An empty tube in which Hadensa is packed costs me roughly Rs. 220 for 1,000 Tubes. When it is put in cardboard boxes, then packed in dealwood cases, and despatched from Calcutta to Madras, it costs me roughly 35 paise per each tube whereas the cost in Germany is 6 to 7 paise. The base Lanolin has to be imported from UK or Germany on which we have to pay import duty. The ingredients have to be imported. So, the actual cost to me at Madras is roughly Rs. 13 to 14 a dozen whereas the imported cost is Rs. 17 a dozen c.i.f.

which includes freight, packing, customs duty and insurance. The retail price of Hadensa in Germany is roughly 3 marks; Rs. 3-4-0 at the old rate. It is sold at a retail price of Rs. 3-6-0. Our price is Rs. 32 a dozen, as against the manufacturers cost of Rs. 16 to 17 and our sale price covers the excise duty, sales tax, profit for the distributor and our own profit.

Shri V. M. Chordia: Since you have a long experience of importing drugs and selling them, why are you not doing basic research or manufacturing at least those products whose patents have expired?

Shri T. Durairajan: It requires a large amount of money and I am averse to borrowing money. I would like to do business with my own money. If I have to produce a basic drug it will cost me Rs. 10 lakhs to 15 lakhs. I do not have that amount, nor am I willing to go to a public institution for borrowing money.

Shri V. M. Chordia: Is it a fact that capital is shy in this industry because there is no attraction for people who do research and invent medicines as they do not get a proper return and so they are not attracted to doing basic research?

Shri T. Durairajan: There is no quick money in the pharmaceutical industry as in textiles or jute. It is a long-term process. Secondly, if I may say so, it is also not possible to have a profit for the person who manages the factory. I do not want to explain it further.

Shri V. M. Chordia: If the person who invests the money is guaranteed that he will at least be in a position to earn whatever he spends and, in addition to that, will be able to have some profit, will he be attracted or not? What changes, do you suggest, should be made in the Bill so that he would have that security and enough profit?

Shri T. Durairajan: I do not think we can make any provision in this

Bill to correct this which is a basic factor in this country.

Shri A. T. Sarma: Just now you have said that your firm does not carry out research work; at the same time, you informed us that your firm could invent at least two drugs which are popular in India and abroad.

Shri T. Durairajan: I am sorry; I think, I have been misunderstood. My firm has not at all invented this formula. This formula was originated by Richard Morsch, who is still alive. He is a pharmacist himself and he invented it in 1904. He has been selling these two drugs all over the world. My firm was importing and selling them. Because of import restrictions we were getting it in bulk and repacking the same. Then we have acquired the trade mark rights for India. We do not make payment for royalty. We manufacture the drug according to the formula given by that firm. We have not invented it and we do not want to take credit for something which we have not done.

Shri A. T. Sarma: You said that something should be reserved for advertisement and research. Do you reserve any amount out of your profits for research work?

Shri T. Durairajan: Unfortunately, I have not been wise. We are only two partners. My firm makes a profit of roughly Rs. 1,70,000 and I get Rs. 1 lakh out of which the exchequer takes away Rs. 60,000 to Rs. 52,000. What is left for me is hardly enough for my own personal requirements. I am thinking of bringing in other partners in due course when we might have a little more fluid position and might undertake research. Research requires large capital and we have not been able to make any provision for that.

Shri Bade: I want to bring to your notice one criticism or comment in the Financial Express and I want to

know whether you agree with it. It says:

"If it is New Delhi's hope that prices of drugs would come down because of the reduction in the validity period of the patent and because of the compulsory licence system, it might find itself disillusioned. It would have been better for the government to follow the example of U.K. and appoint a committee to go into the price system of her drugs."

In your memorandum you have said that the foreigners are exploiting India. Should we have some provision in this Bill or should we appoint some committee to consider it as UK has done?

Shri T. Durairajan: It is easy to make the law but the whole difficulty is how to administer it. All that we can do is to provide that if a patentee works the patent to the detriment of the country, the Government can take the power to revoke it. That is the best we can do; beyond that we cannot do anything. Unless there is co-ordination between the Controller of Patents in Calcutta who will not be able to know the difference between two drugs except on paper and the concerned Ministry which goes into it and grants the licence for its manufacture and a third ministry which controls the prices of drugs, how are we to carry on? After you have finished questioning me, I will make a suggestion regarding the lack of co-ordination between different Ministries which certainly is responsible for certain lacunae in the present system because of which a large amount of foreign exchange is being drained out of this country. As it is not related to patents I did not mention it in the beginning but because there are Members of Parliament present I will mention it at the end.

Shri Bade: The same question must that is why they have incorporated be in the mind of Government and

clause 95(3) about the import of a patented article subject to the condition mentioned in clause 86, namely, that the reasonable requirements of the public with respect to the patented invention have not been satisfied. What are reasonable requirements is also given in clause 97. If the foreign manufacturer has refused to import the article in sufficient number, the Government can give a compulsory licence and can also ask the importer or the manufacturer to fix the price according to the Government's wish. Is that not sufficient for controlling the prices of drugs?

Shri T. Durairajan: The control comes in at the earlier stage. After all, let us know how it works. The patent is granted and sealed on the day the patent is applied for. I do not think the patentee gives the Controller the details of prices. Thereafter the imports come in or the manufacture is going to be set up. Even today the Government is not able to say that a certain price is unreasonable because unless they have competitive prices, how can they say that it is unreasonable? Nowadays we are hearing about Sandoz having been able to make some progress about Glucosides from Podophyllum Roots for cancer. Suppose, they are able to isolate it and bring it in the market. It may be that they may charge Rs. 100 for a week's course. How can you say that it is unreasonable unless there is something to compare? Unless we have some means of comparing it, how are we to take action? The Government cannot act *suo motto*. The Government servant who has taken action will be blamed for it. The data must be available to him to enable him to take action. Where is the data going to come from? So, unless we say "If the patentee works the patent to the detriment of the country", which will enable us to act *suo motto*, where is the question of saying that Government can take action?

Shri Bade: Suppose Government gets quotations from Italy or from other countries...

Shri T. Durairajan: With due respect I will have to say that when you say 'Government', you have to talk in terms of officials in the Ministries, who have to take the initiative. How is the Government going to get quotations? It is not that Government get prices from every trader, or from all the manufacturers. Where is the data going to come from? Across the table I find the Drugs Controller for India sitting. Does he get prices from foreign manufacturers, from all countries, unless somebody goes and tells him?

Shri Bade: I want to put another question about royalty. You have said that it should 7-1/2 per cent instead of 4 per cent.

Shri T. Durairajan: I have said, "in cases where the Government considers it necessary".

Shri Bade: May I bring to your notice that even on 4 per cent, 50 per cent of the royalty is taken away as taxes?

Shri T. Durairajan: With due respect I would submit that this question of royalty will have very little bearing. I do not think that there are going to be many Indian firms which are going to apply for compulsory licences. It is going to be only on paper. It is going to be something like giving music to your daughter before marriage, once she gets married, she forgets the music.

Shri R. Ramanathan Chettiar: In the course of your reply you have stated that ten years could be there provided there is a provision for extension. Could you elucidate that point.

Shri T. Durairajan: If a patentee goes to the Controller and says, "I applied for the patent in 1962; now it is 1972, but I have not been able to get even one cent from this country; it is only now that this drug is getting popular; I would like to get a return" and if he is able to satisfy the Controller and the Controller is also satisfied, then the Controller can

certainly grant an extension. What is actually happening is this. The patentee sells the drug under a trade name. During the life of the patent, that trade name gets into the country. Even after the expiry of the patent, for the next 20 years or so, the patentee gets a return. I can quote a number of cases. Take, for example, sulphathiazole; we can buy 1,000 tablets for Rs. 15. Cibazol which is the Trade mark of a Swiss Firm sell the same at Rs. 60 per thousand. The patent has expired; that drug is no longer used in many countries, but in India the drug is sold at Rs. 60 per thousand and they have a large profit on that.

Shri R. Ramanathan Chettiar: Life saving drugs are sold at high prices in this country. The object of this Bill is also to curb that tendency. But you wanted a longer period for those patents. Don't you think that they will perpetuate their high price policy?

Mr. Chairman: He has already answered that point.

Shri R. Ramanathan Chettiar: He wanted a provision for extension.

Mr. Chairman: Ten plus four, fourteen years.

Shri R. Ramanathan Chettiar: You must have heard of the case of Tolbutamide that is going on between Hoechst and Haffkine Institute.

Shri T. Durairajan: Yes.

Shri R. Ramanathan Chettiar: The Haffkine Institute has been able to produce through a process at a price one-fourth of what Hoechst has been able to do. But unfortunately it is held up because this matter is hanging fire in the High Court of Maharashtra. If you want to extend the period, then such things will prolong.

Shri T. Durairajan: No, that can be covered if this Bill is passed and the Central Government authorise somebody to import Tolbutamide and

still pay royalty. I think this Bill has got the provision for that.

Shri B. K. Das: We have got provisions for compulsory licensing and licences of right. You feel that unless there is transfer of know-how, those provisions will not be of much help. Am I correct?

Shri T. Durairajan: Yes; you are perfectly correct. That is marriage without consummation. Unless there is know-how, how is the person going to manufacture this drug?

Shri B. K. Das: Do you think that there should be some provision in our Bill so that they are compelled to transfer the know-how?

Shri T. Durairajan: Unless there is a provision in the Bill, we cannot compel them. I will give an example. It is not that I am a scientist. Take for instance a vessel, which is rubber-lined, of a particular thickness. If the chemical is treated at a particular temperature, you get that end product. If that is not done, the end product would be different. Unless you can produce that end product which conforms to all standards of the original product, there is very little purpose in attempting to make the same. Take for instance a factory that has been set up by a foreign firm in this country. If that factory is blown up today, the Indian scientists working there will not be able to replace the factory tomorrow unless we get the same technicians to draw the blue print and drawings and have the factory erected.

Mr. Chairman: How can you compel anybody to part with his know-how?

Shri K. K. Warrior: What is the *modus operandi* for that?

Mr. Chairman: How can we compel a patentee to part with his know-how?

Shri T. Durairajan: A provision can be made in the Bill that unless the Indian party is able to make the end product, he will not get the royalty.

Shri B. K. Das: That means you say that till then, he will have to wait for his royalty. Is it your idea?

Shri T. Durairajan: Yes. The foreign man is also interested in getting the money out of this country.

Shri B. K. Das: Supposing the provision is there. The apprehension is that, in spite of that provision, he may not transfer the know-how. Can we have another arrangement with the patentee for transfer of know-how...

Shri T. Durairajan: It can take the form of royalty in a lump sum. That is what is happening in other countries. They are purchasing the know-how by lumpsum payment.

Shri B. K. Das: Should there be any provision in the Bill or it can be done by arrangement?

Shri T. Durairajan: It can be done both ways. But, in my opinion, if the Government brings in a provision, all these firms will certainly respect it. I am sure in my mind that these firms do respect the sentiments expressed in the Bill. If there is a provision in the Bill, it will certainly enable the Indian entrepreneur to discuss with them and probably get better terms than what they would get if the provision is not there.

Shri B. K. Das: It will have some effect.

Shri T. Durairajan: It will have a large salutary effect.

Mr. Chairman: Has any country got any such provision?

Shri T. Durairajan: Not to my knowledge. The difference is this. In most of the countries, their scientific research is so advanced. I shall give an example. I am a musician and if another musician comes to me, he will certainly sing before me to exhibit his talents; if, however, I know very little about music, he will not sing before

me. Likewise, with countries which are so advanced in scientific research, they are willing to come and discuss,

Shri B. K. Das: That is why you want the quantum of royalty to be enhanced?

Shri T. Durairajan: Yes; it is only for that purpose.

Shri B. K. Das: You have suggested 71½ per cent.

Shri T. Durairajan: 4 per cent will not be adequate because whatever royalty we pay is subject to Indian Income-tax.

Shri V. B. Gandhi: You have said that prices of medicines which were patented remained at a higher rate even after the expiry of patent and you quoted the instance of Sulphathiazol. But don't you think that these high prices are also the result of the people's faith in the quality and people's confidence in the quality of the manufacturers's product? For instance, you are manufacturing a product, and if people have great confidence in the quality of your product they will be prepared to pay a higher price than they would for any other ordinary cure.

Shri T. Durairajan: I agree with you. But what I had in mind was that even after the expiry of the patent, Doctors are persuaded to write down the product under the trade name, and not under the generic name, which is responsible for these high prices.

Sardar Daljit Singh: In your memorandum you have said that 90 per cent of the Patents in the field of drug and medicine in our country are held by foreigners. I want to know how many of them are in use and how many of them are not in use.

Shri T. Durairajan: I am sorry, I am not able to give an answer. I have not gone into that question.

Sardar Daljit Singh: You have mentioned that Indian companies imported some drugs from foreign countries and sold at high rates. Contrary to that, here is the instance of foreign firm selling at Rs. 187 for 1,000 tablets of Tolbutamide and the Indian firm, which purchases it from the foreign firm, selling it at Rs. 40 for 1,000 tablets. In the face of this, how could you say that Indian firms are charging higher rates and foreign firms are charging low rates? There are other patents also which are sold at high rates, but in India they are not allowed to manufacture. The instance is the case of Haffkin Institute of Bombay. What is your opinion—is Indian patent cheaper or foreign patent cheaper?

Shri T. Durairajan: The price of Rs. 180 that you mentioned is for the Rastinon brand of Tolbutamide. It is a product of the Frankfurt firm of Hoechst. If an Indian firm imports it from Italy and tablets it they will be able to sell it at Rs. 40. That is the difference.

Shri Bibhuti Mishra: On page 4 of your memorandum you have said as follows:

I would also submit that we have to consider the various clauses in the Bill, from conditions existing in India, and not with those in advanced countries, especially in view of the present acute foreign exchange position, which I am afraid will continue for the next 5 to 10 years.

What is your suggestion to help India get out of this situation?

Shri T. Durairajan: The only remedy is to get liberal foreign exchange import.

Shri Bibhuti Mishra: At the end of page 4 you have said:

Although under the provisions of this Bill, the authorities do not have the necessary powers to

check such malpractices, if a committee is appointed to investigate such imports during the past say 20 years, it would probably be a revelation, as to the large amount of foreign exchange that has been drained from this country.

At one place you say that this Bill is sufficient to stop malpractices. In the end you say this Bill is not sufficient. How do you say two different things?

Shri T. Durairajan: All that I have meant is, even under the present Bill I do not think the Controller of Patents nor any Ministry can question a firm if they are going to import a basic chemical which is very effective in the treatment of Cancer for Rs. 10,000 and process it here and sell at Rs. 30,000. How are you going to check it? If a Committee is appointed, they can go into the question of prices that these firms are charging and the moneys they are paying to their parent Companies to import intermediaries. Coming to intermediaries, take the case of Sulphathiazol. If the basic price is only 15 shillings a kg, they have been paying 20 shillings to import the intermediary because they are able to realise a much better price in India. They import Acetyl sulphathiazol and make lot of money on that. There is no point in my saying it as a gospel truth. That is why I have suggested the appointment of a Committee who can report to Parliament.

Shri Bibhuti Mishra: You pointed out in your memorandum that some malpractices have been committed by some companies. Could you give us some examples as that would help us?

Shri Bade: Instead of pointing out such malpractices, if you could suggest some provisions to be made in the Bill itself, that would be better.

Shri T. Durairajan: Unless you are satisfied about the correctness

of what I say, how are you going to act?

Shri K. K. Warrior: You can substantiate that general statement.

Shri T. Durairajan: I cannot go into the books of those firms nor can I have access to the custom bills of entry.

Mr. Chairman: I might tell you that the matter is being referred to the Tariff Commission.

Shri Bibhuti Mishra: He says that there are malpractices. He also suggests setting up of a Committee which will go round the country and then submit their report to the Ministry. Thereafter that Ministry will consider. Instead of doing that in a round-about way, when you say that there are malpractices, can't you give examples as that would help us?

Mr. Chairman: He says that he has no details with him. But, I can tell you that the matter is being referred to the Tariff Commission.

Shri Bibhuti Mishra: If that is referred to the Tariff Commission there will be a long process.

Mr. Chairman: What else can be done?

Shri Bibhuti Mishra: Let him say the places where such malpractices are being committed.

Shri T. Durairajan: Let us take an example. Take Chloramphenicol. This is the name of the drug. That is being sold in the name of Chloromycitin by a firm named Park Davis; they have got a factory in Bombay. Do you know as to what they are doing? They were importing the last stage of chloramphenicol purified that, bottled it and then sold it. As compared to the world price for the finished product, the price that they were paying to the parent company for the intermediary was far in excess of the price for chloromphenicol. All firms pay the price only for the finished products. It is not possible to get competitive prices for the intermediary unless

some other countries also have submit a manufacturing units. The prices they pay for intermediaries are far in excess of the world price the reason behind that being obvious. Take for example sulphadiazine and sulphathiosol. All that they were doing was importing the last stage, and then purified the same and then they sold it. The prices paid for that were, in my opinion, far in excess. But, you may not be able to accept what all I have said as correct, as I have no factual data to prove the same. Even if I ask the firms, they would not give the details. Unless the Government authorises somebody to get these details, they would not care to supply them. You know Sir, that there was a pharmaceutical enquiry committee set up in 1950-51. Here also, I don't think that any firm ever cared to answer all the queries. Circulated to them as originally they did not have the necessary powers.

Shri Bibhuti Mishra: This is a very serious thing. He says that lots of foreign exchange are being drained out. He should prove that. He must tell us as to the places wherefrom the foreign exchange is being drained out. We must know that since we are suffering very much for want of foreign exchange. All sorts of agitations are going on in the country. That is why I say that he must give us in writing the places wherefrom our foreign exchange is being drained out.

आज सारा देश तबाह हो गया है। फारेन एक्स्चेंज की वजह से हमको डिबैलू-एशन करना पड़ा जिसके लिये सारा देश आन्दोलन कर रहा है। उन को पता है कि वहाँ कहाँ से हमारे फारेन एक्स्चेंज वा खात्मा हुआ। वहाँ से फारेन एक्स्चेंज घटा है। उन जगहों का नाम बतलायें, आदमियों का नाम बतलायें, उन को टैफिशियन के पास भेजें, प्राइम मिनिस्टर के पास भेजें। जब चोर पकड़ लिया गया तो उस चोर का पता तो बतलायें।

Mr. Chairman: He has given you three or four names. He has not got the other names.

Shri Bibhuti Mishra: Let us ask him to submit a report in writing as to the places wherefrom the foreign exchange is being drained out.

Mr. Chairman: He has given the names.

Shri Kashi Ram Gupta: From the memorandum that you have given and the suggestions put in it, I conclude that you have a picture of basic research being done by the Government Institute.

Shri T. Durairajan: Except for my having gone round the institutions whenever I had opportunities, I have had no further knowledge about what exactly they are doing.

Shri Kashi Ram Gupta: My point is that when you recommend a certain thing, the picture with you is that basic research should be done by Government Institutes. Is that your idea?

Shri T. Durairajan: That is correct.

Shri Kashi Ram Gupta: Therefore, you have based your suggestions on the fact that all pharmaceutical industries must be doing only the product research or the applied research and not the basic research.

Shri T. Durairajan: Pharmaceutical industries are more interested in what might be called processing of household remedies. At present only one firm is doing, what may be called basic manufacture.

Shri Kashi Ram Gupta: Perhaps you do not know. Productions from Indian factories are the results of their product research in India both in the public as well as in the private sectors. In Bombay, there are lots of factories doing product research.

My point is this that in India, product research is part and parcel of the pharmaceutical industries alone. You have yourself mentioned that they get income-tax relief and so on and so forth on that.

Shri T. Durairajan: That is correct. But, so far we have had no results. That is all I can say.

Shri Kashi Ram Gupta: The question of result is not there. But the question of taking up the work is there. They have taken up this work and they are doing that.

Shri T. Durairajan: I have no objection to what you say.

Shri Kashi Ram Gupta: Have you not seen any one doing the product research?

Shri T. Durairajan: Excepting that they have set up some research units I don't think that they have set up production units.

Shri Kashi Ram Gupta: CIBA is doing basic research. They are doing product research too.

Shri T. Durairajan: These units are set up with a view to finding out the way of reducing the cost of a product as well as to keep the longevity of the product. They might be doing all these things. All these things do take a lot of time. Let me explain about the antibiotics. Tetracycline is now invented. They get the soil from some country; that soil is given all the necessary food and then grown. When that soil is further processed it produces a sort of a chemical. It is only from that chemical that they are able to isolate tetracycline. But that takes a lot of time. Once they are able to isolate the chemical and find that it is not toxic and it gives results, then they preserve the basic mother culture and defreeze it and produce the product.

Shri Kashi Ram Gupta: Naturally, the question is that if such a research is going on in some of the laboratories it means that the expenditure on that item is an additional expenditure.

Shri T. Durairajan: Every trader knows his job. They do not spend money from their capital. From profits they ear-mark a certain portion and spend on that item.

Shri Kashi Ram Gupta: My question is a simple one. When they do research, it is spending money extra than what others are going. Naturally it will come out of their own money. There is no contradiction to it, but there is something extra that is done there.

Shri T. Durairajan: That is correct.

Shri Kashi Ram Gupta: Do you know that Hindustan Anti-Biotics, Pimpri has got a patent for certain anti-biotic?

Shri T. Durairajan: Yes, for Haemycin.

Shri Kashi Ram Gupta: You have suggested 10-year period for the patent. Do you want this period to commence from the date of completion of the specification or from the date of the grant of patent?

Shri T. Durairajan: From the date of application.

Shri Kashi Ram Gupta: You have not suggested that.

Shri T. Durairajan: As per the Bill it is from the date of application.

Shri Kashi Ram Gupta: You are wrong. In the Bill it is from the date of completion of the specification and not from the date of application.

Shri T. Durairajan: When I said 'from the date of acceptance, I meant the date of application. If you say 'from the date of sealing', many diffi-

culties will arise. Suppose, the patentee makes an application to the Patent Office for patent and the Patent Office calls for some more information and removal of some irregularities and after they satisfy themselves, they accept the application and once they accept, it is only from that date the period should count. I would like to make it clear that it is not from the date of sealing.

Shri Kashi Ram Gupta: Here, in the Bill it is given that the date of completion of the specification is named as the date of patent. Do you agree to that?

Shri T. Durairajan: Yes, that is correct.

Shri Kashi Ram Gupta: You see clause 43(1). The date of the patent means the completion of the specification. That means the filing of the complete specification and not the initial application.

Now you have suggested that in certain special cases an extension of 2-3 years can be given. Now you will realise the importance of the difference between the date of completion of specification and the date of sealing which may take 2-3 years. Instead of doing like this, why should we not have 10 years after the date of sealing?

Shri T. Durairajan: Why I am saying so is: in some cases it may take 10 years from the date of application to the date the Patent Office seals the patent. The proceedings may go on and it will unnecessarily drag on and may give an unfair advantage to the litigant. In order to get over this anomaly I merely said 'from the date of acceptance of the application'.

Shri Kashi Ram Gupta: In the Bill there is a time limit given for the completion of the specification. We can similarly stipulate a time limit for sealing of the patent also.

You will find that the Bill provides 10 months for the completion of specification. An equal point can be that the Controller should finalise the sealing of the patent within 2 or 2½ years. That could possibly be put in the Bill.

Shri T. Durairajan: It could be possible, but it is also possible that the patentee can apply and go on getting time whatever may be put in the Bill.

Shri Kashi Ram Gupta: But once the time limit is fixed, then one cannot apply for time.

Then you have suggested that the royalty should be 7½ per cent. How did you arrive at this figure of 7½ per cent, not even 8 per cent?

Shri T. Durairajan: I did not want to think of 8. I suppose 3, 13 and 8 are not considered proper. It is purely guess-work. Instead of 8, I said 7½.

Shri Kashi Ram Gupta: You want a clause to be added for disclosure of technical know-how. You say that if the patentee gives a compulsory licence and if the licensee is not able to produce the goods, mere grant of compulsory licence would not be of any use. You know royalty is paid only if he is able to produce the goods. There is no use of putting a condition for know-how and the patent condition will be enough and know-how can be negotiated separately.

Shri T. Durairajan: My submission is that the patentee would have done his duty by simply giving a licence to the manufacturer and what the manufacturer does is his own business. What I say is: the licensee has to pay the royalty only if he is given the technical know-how, not alone the licence to manufacture.

Shri Kashi Ram Gupta: Yours is a registered firm. A limited company in such cases can be better suited. What is the hinderance for you to make it a private limited firm to in-

crease your activities for the good of the country?

Shri T. Durairajan: I could have done it, but I have not chosen to do it so far.

Shri K. K. Warrior: I wish to know how much difference you will make out if the patent rights are given to the process or to the product. Are they almost the same in practice?

Shri T. Durairajan: The only basic difference is this: if the patent right is given by the process, it will give an initiative to somebody else to find out an economic means of manufacturers and bringing down the cost. If I am a patentee and I am given a patent for a product, I will not care to find out any other process and reduce the costs.

Shri K. K. Warrior: If the patent right is not given to the product also, don't you think that there will be more stealing of the know-how and infringement of the patent rights?

Shri T. Durairajan: Theoretically what you say may be correct by saying that there may be infringement. But as I said earlier—of course it is for you to give patent rights for the process or for the product—if you give patent for a process, then the patentee would try a number of methods and choose the most economical process and get it patented. But if you give patent for the product, then he may not even think of doing that and even if somebody-else is able to evolve a more economical method, he will be shut out.

Shri K. K. Warrior: Now as to the period of the patent rights, do you agree to a period lower than 10 years. Some countries are giving 5 years or 7 years. Why should there be 10 years? Why not a smaller period? Because you yourself said that even after the expiry of the patent, there are chances of marketing the same product and nobody competing it and there are chances of getting returns

and recouping the capital involved. So, why should we not reduce that period in consideration of so many other factors in India?

Shri T. Durairajan: This reduction in the life of the patent is not certainly going to give us much benefit. It makes no difference whether it is 10 years or 12 years. The patentee derives a larger share of the profit from the product after the expiry of the patent than during its life. There are figures to prove that. I will read out an extract concerning the United States. "The generic name is not the chemical name. The generic name is supposed to be a shortened name for the product. If your shortened is not very effective, you are going to have a very long name, but you can make it shorter. To come back to the problem you are talking about. Take a well-known drug such as Hydrochlorothiazide which is marketed under the names of Hydrodiuril and Esidri. And I think there are two or three other companies manufacturing it under trade mark names. Hydrochlorothiazide is not terribly difficult to remember but the advertising has it in extremely minute letters, and no effort is made to get the doctor to remember Hydrochlorothiazide. Effort is made to make him remember the trade names, Hydrodiuril or Esidri or one of the others." This is exactly what is happening in America.

Mr. Chairman: The doctors are brainwashed!

Dr. C. B. Singh: The doctors are so busy that they can't remember the generic names. They are generally very long and difficult to remember. The doctors can remember only those names which stick in their mind and are easy to remember.

Shri K. K. Warrior: In the cost structure of finished products in the field of pharmaceuticals, what approximately will be the contribution through patent right which gives monopoly right?

Shri T. Durairajan: Easily 100 per cent.

Shri K. K. Warrior: The cost is made up of so many factors and out of that, how much will this patent right contribute?

Shri K. V. Venkatachalam: Fifty per cent he says.

Shri K. K. Warrior: It has been suggested that if this Bill, as it is, is passed, foreign capital would be scared away. What is your reaction to that?

Shri T. Durairajan: Unfortunately, I am not in a position to talk about it authoritatively. But I can tell you that this Bill, if enacted as it is, will not scare away foreign capital. I can even go to the extreme and say that even if we abrogate the patents law, foreign capital will come. The foreign companies who have come into this country and have had a strong hold here, did not come here to invest capital.

Shri Arjun Arora: Will you be able to tell us as to how royalties are paid? Is there any scientific basis on which the rate of royalty is arrived at, or is it merely a matter of bargaining?

Shri T. Durairajan: It is a matter of bargaining. But from the royalty agreements which I have had occasion to see, it is one of the two ways: cost of manufacture, which will include factory overheads and administrative overheads, plus 15 per cent of the profits for the licensee for manufacturing in a foreign country; the difference is shared on a 50:50 basis; alternatively it is a flat 15 per cent subject to tax.

Shri Arjun Arora: Do you know of any case where an Indian firm has entered into an agreement on the basis of 50:50?

Shri T. Durairajan: I can't remember. But even if there is any agreement, I suppose the Government ought

to know for without the sanction of the Government, he can't enter into an agreement. He has to get the consent of the Ministry of Finance and the Ministry of Industry.

Mr. Chairman: Any more questions?

Shri T. Durairajan: Sir, I may also mention that we have some trade marks that have never been worked. They were only exporting these articles. So these products were not available here. Now when an Indian firm tells the Government that it would like to manufacture this and pay them a 2 per cent royalty, the Ministry will say "we will not sanction." It happens not only in the pharmaceutical industry but even in the engineering industry. But what is happening is, for example, there is firm called A.B.C. Limited, London, and that firm has got a subsidiary company at Bombay, known as A.B.C. India Limited, with a capital of Rs. 5,000. This firm is authorised by the firm, A.B.C. London to manufacture the product in India. Now, it is only when they employ a certain number of people that they have to go to the Ministry of Industry and apply for an industrial licence. In the small-scale industry, they need not apply for a licence. They merely ask some factory in the small-scale sector to manufacture it for them. They need not apply to the Government at all. They manufacture it. Now, if the cost of production is Rs. 9 per dozen, then the Indian firm sells it to them at Rs. 10 or Rs. 11 per dozen. They then market it at Rs. 25 per dozen. The profit which come to 100 per cent minus expenditure on advertising, etc., is remitted to U.K. (The whole of the profit) I just wanted to show that trade marks and patents are related to each other. They are now dealt with by two different Ministries, trade mark by the Ministry of Commerce and patents by the Ministry of Industry. About the products that are manufactured and sold, neither the Ministries nor the Drug Controller have any knowledge. But still money is being remitted out of this country and the Reserve Bank of

India have merely to sanction it for a company owned by a foreigner. At the end of the year, they merely file the balance-sheet and say "we have paid the taxes, the money has got to be remitted." But about the product the Government knows nothing. I can give a number of products which are being manufactured in this country. Here are two products which I picked up as I was coming along. One of these products has been coming to India for over 50 years.

Mr. Chairman: Thank you very much.

Shri T. Durairajan: This is only a trade mark. There is no question of patent. It is purely a mixture or a combination of a few drugs and is being sold under a trade name.

Shri Bade: In Japan no body is allowed to import manufactured drugs. They must manufacture it in Japan, and they must show the know-how also and unless and until they show this, no foreign manufacturer will be allowed to import goods. He must manufacture in Japan. If such a provision is made in India, what have you to say?

Shri T. Durairajan: Japanese pharmaceutical industry is controlled only by 5/6 firms. I know this firm of Takeda. Before the first World War they were agents for the German firm, Bayers. Gradually this, Takeda, who was only a distributor for Bayer products, today he has become a giant. There are only 5 factories and all the pharmaceutical manufacture is done by these 5 people. As opposed to India, in Japan all these factories are controlled and owned by the Japanese people. They have really been much advancing. There is no point in comparing ourselves with them. It is just like saying my neighbour's son is a scientific worker, whereas my son is in the third or fourth form.

Shri Bade: If we make this provision in our Bill....

Shri T. Durairajan: We can make a provision but we must have the necessary background. With regard to industrial development until we have that, I am afraid, we cannot do it.

Mr. Chairman: Thank you very much.

(The witnesses then withdrew).

II. Pharmaceutical Manufacturers' Organisation, Ahmedabad.

Spokesmen:

1. Shri Hasmukhlal C. Shah,
2. Shri I. A. Modi.

(The witness were called in and they took their seats)

Mr. Chairman: Gentlemen, the evidence that you give is public. It will be published and laid on the Table of the House and distributed among the Members. Even if you want any portion to be confidential...

Shri Hasmukhlal C. Shah: I think, it is not necessary.

Mr. Chairman: We have received your Memorandum. It has been distributed to all the Members. If you want to stress any particular point, you may do so. Afterwards, our Members will ask you questions.

Shri I. A. Modi: In our Memorandum we have stressed all those points.

Mr. Chairman: By and large, you are in agreement with the provisions of the Bill.

Shri Hasmukhlal C. Shah: We fully agree with the provisions of the Bill.

Mr. Chairman: Anything on which you differ, you may just dilate.

Shri Hasmukhlal C. Shah: The only thing I want to stress is about compulsory licensing and free licensing. The procedure for licensing should be so simple that anybody can take up the production pending a de-

cision of the Tribunal or special body appointed for deciding that case. Ultimately, the royalty would be given by the firm and if they are in agreement with that and also in agreement with the Drugs Controller Department that the drugs manufactured by the firm are, in agreement with the rules and regulations, then the firm should be allowed to manufacture that particular drug pending decision about the royalty. Sir, in some cases what happens is that it takes lot of time to decide the case of licensing. Sometimes it takes 4 to 5 years. It you take the example of Tolbutamide, it is still in Bombay High Court. It is lying there for the last 4 years and the poor Indian people are suffering. They are selling the drug at Rs. 187 per 1000 tablets and if we are allowed to manufacture by buying raw materials from the Italian market and if it is manufactured in India, by Haffkins, and if we are allowed to buy that, we will be selling it at Rs. 60 per thousand tablets. The poor Indian people are getting 300 times more costlier products. The poor people are really suffering and they need the real help. If we can do this service to our Indian people, we would be very grateful—I mean if we are allowed by the Government to do so. Provision is already there about compulsory licensing but then it has to be made little more stricter and much easier also.

Mr. Chairman: What do you suggest.

Shri Hasmukhlal C. Shah: We suggest that if we make an application for licensing and if we do not hear anything from you within 6 months, we must be allowed to produce or manufacture that particular drug provided the Drugs Controller's administration Okays it, because it is a drug and the Drugs Controller's Department must go through it. That is our contention, Sir. Compulsory licensing alongwith royalty. Royalty may be decided by mutual agreement with the patentee, but there

should be a maximum and, as you have suggested in this Bill, 4 per cent, we are agreeable to that part of it also.

Shri I. A. Modi: In substantiating our Memorandum before this Committee, we want to put three important questions. These questions are—as we understand today as far as this Patent Bill is concerned, I think it is mainly opposed by those parties who are either foreign manufacturers or are in collaboration with them. If we study the history of this Patent law in all the countries of the world, I think almost all of them have no patent for the product. I say why you want it in India? In what way, if you are interested to serve the interests of the country, will the interests of the Indian people be served if this amended Patent Bill is adopted? That is one thing. A few other points are rather being put forward that this bill should not be adopted or accepted. It will be one thing if I just say, as Justice Ayyangar has put in his Report, it would be an exaggeration to say that the industrial progress of a particular country is considerably stimulated as to whether the system is suited to it or not, that we will have to decide. We will put a few questions. What are the facts? Has our country shown any progress in these 19 years in any new invention under the present patent protection? I say the answer is definitely 'No'. I do not think in India we have been able to do anything better under the present Patent law, as they claim, it will be in our interests and the technology will be flowing from developed countries to the undeveloped countries like India. Rather this country is given unimaginably exorbitant prices for life-saving drugs. The question arises how one can develop? I say, naturally one can do it by marketing such products which are more in use and which are more upto date. The volume of turn-over will keep the prices down and will provide funds for research. Thus both are benefited—the poor suffering humanity

gets the product cheaper and the organisation gets the funds to initiate research. After all, for any research the funds are very important. And these funds do come only from the turn-over of the organisation and this turn-over of the organisation is never possible if up-to-date things are not taken for selling or for trading. That is most essential. Another thing, we believe, is that if this patent is restricted to only process, as it is recommended by this Patent Bill, it will rather instigate competition and instigate more researches. An organisation will be compelled for more and more new inventions due to competition and demand in the field. After all this research is being done by large manufacturers not because they want to do any good or charity to the public or to the humanity but for their own survival; rather to meet competition with other manufacturers in their own country they will have to continue this research, I say, every day. So if compulsory licensing comes, naturally there will be more and more researches. I think the world will be greatly benefited by this. About compulsory licensing I will take two minutes. Justice Ayyangar has quoted a quotation from Sir William Houldsworth: "Anything like compulsory licence given by a foreign patentee to manufacturers in this country would not meet the case. The foreign patentee acts as a dog in the manger, sends his patented articles to this country, but does nothing to have the patented articles manufactured here. He commands the situation and so our industries are, under our own law, starved in the interests of the foreigner.....Those who feel most strongly on this question think that there should be nothing but an absolute revocation of the patent if it is not worked in this country within two years and the Fry Commission was of that opinion... The clause as presented in the Bill does not fulfil the ideal which was recommended by the Committee but it goes a long way in the direction. At any rate, it is an immense improvement in the

present position and therefore it is acceptable."

Sir, my submission is that it is in the interest of India as well.

Shri Hasmukhlal C. Shah:
There is a slogan now "No patent, No New Drugs". I fully agree with that, but at the same time I disagree with that. If this is the case the space Research done by Russia would not have taken place. In these days of competition whether people get money or not but by one or the other reason they like to work and when and where they work they always get some new Research. For what such good money is spent by such Socialistic countries. Sometimes the personal ego is also responsible for the new research. Great scientists have never bothered about money. Fundamental researches are all done for the benefit of the human being and not for money. It is said that the prices of the unpatented drugs are higher in India than others. This is because the intermediates and the raw-materials manufactured in India are purchased at higher prices. The processes for the same products manufactured in India and other countries are the same but here because the raw material costs high and because we have to pay very high price for intermediates the price structure here is high than compared to any other country. The other raw-materials required in some products manufactured in India are costlier. Secondly, the initial cost of equipment, building, etc. are higher. Also the import duty, excise duty, on various raw materials are levied very high. These all constitute the prices of the Drugs manufactured in India which are not patented or whose patents have expired. The processes followed are almost the same in this country or in any country. Secondly, in some cases much advanced processes are found than the old patented one and hence the cost of production is lower. In case of Italy when a price of a product is higher, it is because sometimes high cost of production

and higher standard of living and higher margin of profits and less competition. If you go to African countries, South East and Eastern countries you will find that lot of firms of repute sell their products at one-third of price sold in other countries. That is the reason why Indian manufacturers are not able to compete them in other countries. We just take one example. Some people are talking about Librium of F. Haffman La Roche & Co. It is said that Librium is the product of confidence and hence in India 76 per cent is the sale of this product. Six firms producing similar products captured 21 per cent of the market. The remaining firms cover only 3.4 per cent of the market who are selling at a reasonable price. They argued that the cost structure on the product is very competitive but it is the confidence of the doctors for the drug which is more responsible for the promotion of the product. I just do not understand why such a huge amount is spent on promotion. In India today the self-same situation exists. An Indian firm imports the active ingredient of Librium at Rs. 312 per kg. from Italy, while the original inventor supplies to its associated company in India at Rs. 5,555 per kg. Why such a fantastic price is charged by the patent holder? I am sure some of the learned member of the commission know that this was discussed in the Parliament. But a drug is imported in India only when it is approved by the Drug Controller of India that the claim made of the product is genuine and the Drug Controller of India approves that the chemical produced at Italy is the same of Librium which is imported at Rs. 5,555 per kilo from Switzerland. In putting this figure before you I have no other intention, Sir, but to impress upon you all learned Members that for what we are paying such an extravagant price at the cost of poverty of India? I am sure learned people like you would understand the situation in giving an undue protection to the patent law. In this case, compulsory licensing should

be the best solution and if compulsory licensing is made the patent concern would reduce the price to compete the sale for their business as well as prestige. The product Patent which has been given is really very much favoured by those people. They like it because if there is product patent then nobody would be able to compete and they would be having the monopoly of the same chemicals and the product in India.

I have not observed a single Research done by any foreign concern in India for the last 17 years which is worth the name. I do not know where the profits go which they claim to be 5 per cent to 20 per cent. What is the idea of recovering such high Research prices when they are not going to make any Research here in India. This clearly means that for initial stage research is not possible and hence the Big International Firms have not made any contribution for Research in India so far. So it clearly means that for initial stage research is not possible as it is done in Italy and proved by Big International Firms who are recognising the Patent Law in India.

Now we cannot just start abruptly. They want us to run the race with them when they are already 100 years ahead of us. They have already crossed the initial difficulties. So we must be put at the same level. Then it would be easier for us to compete with each other. For 10 years all these patent laws should be kept aside to allow us to develop our technology as Italy has done it.

So far very few patents have been taken by Indian research workers. Only few Indian research workers—very few I say—because there is not an outstanding research in India for medicines and drugs. In that case 54 crore Indians are suffering. We are paying very high prices for drugs. Now, take this medicine Oxichlortetracycline, even Government of India, i.e., Hindustan Antibiotics wanted to manufacture and they advertised saying that they are putting

the drug for 8 annas a capsule but some foreign firms intervened and as such even Government could not do much about this. So if Government felt helpless because of the patent laws for small firms like us it would be very difficult to go ahead with the research. Without having the momentum of research as Italy has got it will be really very difficult. In Italy they allowed the patent for 10 years and only the process which the inventor has developed. If he feels that this particular drug can be manufactured by 100 methods those 100 methods have to be patented and not one.

In India the patents are accepted from the date they register in the country. Now I differ with this because the patents should be exploited from the date it is registered in the country where it is registered first. Now it happens they register in their country in 1961 and come to India only in 1966 and so they register the patent after 5 years. Now they have already got the advantage of those years. What I mean is, Sir, the patent should be registered not from the date of application but from the date that has been registered in another country first so that whatever they have made they should pass on to us earlier.

I further submit that most of the research done by the Big International Firms are for their personal prestige and also for the personal profits and existence. There is a very keen competition between the big International firms and for their existence they have to make their research for their own people. When they make research they never keep in mind India. They are making research for their own country and hence they decide their prices and to my mind most of the drugs get back the money spent on their research in the first few years. My contention is that primarily the research was made for their own coun-

try, and hence the prices to other countries should be much lower; they should pass on the benefit for the sake of humanity on a very meagre margin. Compulsory licensing may be considered at least in this country at a very reasonable rate and also by a very easy procedure.

Our balance of trade since independence has been very unfavourable and we do not know where we will stand in future. It is therefore very necessary that for uplifting the scientist and technologist in India, they should be given opportunities to even repeat the patents that are expiring if by that we can produce drugs at cheap rates. We should not be thinking only of investigators, whose number is very much less than those of scientists and technologists. Inventions are only one or two per cent, while the sufferers are 98 to 99 per cent. So, in the interests of the public there should be no patent for the next 10-15 years. Young scientists of India will take over. Italy and other countries, because of their experience in imitating other drugs, have progressed much and are now able to develop their own research. So, opportunity should be given to our research workers, scientists and technologists to develop know-how.

It is true that there are so many expired patents and nobody is undertaking work on them. My submission is that the labour and profits involved in developing the technology of such products is so meagre that they are not attracted, but in some cases where the profits are high, the known patents have been worked out in this country. In some cases, new technology has been developed for the expired patents. What is wrong if the products of the present patents are exploited and if the manufacturer is ready to pay royalty to the patentee and wants to serve his countrymen by supplying drugs at cheap rates? Why should he not be allowed to do so?

Tolbutamide and chloropromide are meant for the same disease. Both

have been developed by the same company, but they have been licensed to two different people by this company—Hoechst and Pfizer—and each is claiming that his product is better, while, in fact, they are the same. I do not know why such things should be allowed in India. The research company itself should decide which is better and licence that alone. Instead, they are exploiting the people.

Similarly, Schering of Germany have got two types of tablets, Anabinol and Duocanal. The ingredients in both the cases are more or less the same, but they are selling at different prices.

The patent for a particular acetate expired in 1961. Till then it was sold at Rs. 80 a gram, but now it is selling at Rs. 43.

The patent for Tetracycline was over in March, 1966. Immediately ICI reduced its price from £5 to £1-2-0. This is how patents are being exploited. We want to substantiate these points in our memorandum and I shall mention a few points by way of examples, and by which we can do justice to the memorandum. For that, we have come before the Committee.

I shall just mention the limitations of this poor country where the people will have to fight for justice and even for the things which are good for the Indians. If we review this whole Patents Bill which has come up, we will find that many things referred to in this Bill are based on the learned report brought out by Justice Ayyangar. Justice Ayyangar has reviewed the existing patent laws all over the world and has recommended to a great extent which is good for this country. Still, I think if we study the situation and see who are for this Bill and who are against this Bill, I submit that you will find that those who are for this Bill are small persons like us, who are small-scale manufacturers, those Indian manufacturers who are in the real sense Indian manufacturers without any col-

laboration from foreigners. Those who are against this Bill are fairly good, well-developed countries, including the Governments and the embassies and the foreign manufacturers in this country and their collobarators who are really speaking Indians; they are mostly against this Bill.

You will definitely realise the limitations, that the people like us have. You will find, even the press has been influenced by those people with very wide resources. I have not seen any single newspaper where in they have written an editorial, even a few lines in favour of the Patents Bill. But if you take up some big newspapers, you will find big editorials representing those points which the big industrialists tell. I am sorry there is not a single paper or an editorial which endorses the views of Justice Ayyangar. They all have everything to say against this Patents Bill. God knows why?

There are certain limitations which must be realised, in putting our points of view, because, resources for the masses are the least while the resources for those who are against this are more. and in this we will have to convince the Committee, as far as this Bill is concerned. I think that the minimum requirements that have been mentioned should be explained. There are three or four points that are put forward in respect of the Bill. First, on research a very huge expenditure is incurred. If there is no safety or security, the scientists will not be interested in carrying out research. I do not think that Roche, Hoecht or Pfizer had started research from the day they came into existence. From where they have brought this fund into the picture? If I am not exaggerating, let me tell you that the consumers have contributed very nicely towards research. The report No 448 of Senator Kauffeur—I am sure you will be well aware of it—has taken out the data of 20 major companies and found out that research expense is 6½ per cent of their

total sales. This 6½ per cent expenditure, they have already recovered from the consumers.

If you see the selling expenses of any organisation in this pharmaceutical industry, it will not be less than 25 to 30 or 35 per cent or more than that. I ask why do if they not require any guarantee or security for this 30 per cent expenditure? They do not want it because it is compulsory for them to establish for themselves. Why do they require security for 6½ per cent expenditure on research? The consumers have already contributed to it. I do not think for a commodity like drugs, which are meant for the health of the nation, we should be allowed to be exploited only for those beneficiaries.

The second point is about recovery. The man who initiates or the man who comes first in the market has his own advantage and is going to sell more and because of that, on his trade mark, he gets compensation. Again, this Bill is already providing the facility of licence of rights, particularly in drugs and medicines. Royalty is being paid to the manufacturers. Royalty means another 10 to 15 licensees who have got selling agencies and who spend a lot for producing the sales. I think they will save more. as the patentees will earn four per cent royalty without incurring sales expenditure for selling their commodities.

Thirdly, it is said that if this Bill is passed the incentive will die down for the scientists. As far as the scientists are concerned, they are mostly the employees of the organisations. The knowledge which he has acquired during his studies has to be utilised. and he will definitely try to put it to test and gain credit before he leaves the world. His enthusiasm, will not, therefore, die down and the incentive will not be absent because there is no so-called security.

Even these organisations, who say that their incentive will die down—the incentive can never die for them,

because the organisation is doing research for its own survival, and to survive competition in its own country. They will have to do research and find out something new. Otherwise, they know that the huge amount of profit will go away. By the way, I will not be doing anything wrong if I give the example of our organisation. I am talking of the Indian Pharmaceutical Association. In 1965, in Baroda, our Indian Pharmaceutical Congress Association passed a resolution in favour of this Bill by a thumping majority. It would not be an exaggeration if I say that the thumping majority was 99 per cent. But to our bad luck, in the IPA, the foreign collaborators managed to come on the committee to chalk out the memorandum against the will of the 99 per cent; rather the view of a few persons prevailed in the memorandum which opposed the Bill. This will give an idea of the limitations under which we work.

The name of Justice Ayyangar is being used. It is said that he was also not in favour of fixing a royalty. The Patents Bill fixes a royalty in case of the drugs and medicines to a maximum of four per cent. Justice Ayyangar was aware and thought that it is very necessary that some thing should be done. He has said why he was not in favour of fixing a royalty. He has given his reasons. Firstly, the percentage varies from industry to industry. Secondly, no reasonable rate can be arrived at, and thirdly, if the maximum rate is fixed, there will be a tendency for the licensee to ask for it. While formulating this Bill, the same question should have arisen in the minds of others also, as it arose in my mind. Suppose I apply for a licence of right and I am asked to start the manufacture of a drug, now if I do not know I have to pay a maximum of four per cent, there is always a sword hanging on top of me. If the controller at the end fixes 15 per cent and if I calculate three to four per cent, the whole thing will go phut. So I will have no enthusiasm to work the patent and put it on the

market. And so, for that very reason the fixation of a royalty is a "must". Otherwise, with a hanging sword above, it will be very difficult for an Indian licensee, without any danger, to proceed ahead. What about the court decision? I was a party in the the Tolbutamide case. So, maximum royalty is a "must" and we agree it should be 4 per cent. In 1919 even the U.K. had found it necessary to amend their Act and introduce section 33A so that in chemical substances, only the process can be patented. After that UK industry started making remarkable progress.

In clause 5, the plural "methods or processes" should be removed and only the singular "method or process" should be put. Take Tolbutamide for example. This can be produced by so many processes and Hoechst have taken a patent for this product with the result that all the imaginable processes for producing this product have been covered and every road is block-blocked. The Hafkin Institute have been successful in making this product through an impossible process. But they have been challenged by Hoechst in a court of law. So, only the singular "method or process" should be used in this clause.

If this Bill is passed, we can get the licence of right under the compulsory licensing system after paying royalty. Even Justice Ayyangar has found that it is the experience of each and every applicant for the licence that the real technical know-how is not given, but it is hidden. So, after royalty is paid according to the Controller's decision, if the licensee cannot work on the process which is declared in the patent office, then it should be made obligatory on the patentee to give that technical know-how whenever it is demanded. Then only payment of royalty will be justified.

So, for a country like India, this Patent Bill is the minimum and it is a "must".

Sardar Daljit Singh: In your memorandum you have said:

"As we could see crystal clear, we have waited for 18 years and now let us wait for another 18 years without patent restrictions and watch the progress."

What are the arguments to support this?

Shri Hasmukhlal C. Shah: You will be surprised that all these 19 years not a new product or patent worth the name has come out. In India 80 per cent of the production of pharmaceuticals and drugs is by foreign collaborators or their associates. When we ask the reason for their high price, they say it is because of research expenditure. If that is so, why have they not been able to do anything in India in these 19 years? Some of the foreign manufacturers have no research laboratories at all. What they charge in the name of research may be spent by them in some other ways to suppress us or transfer the money to their countries by paying higher prices for the raw materials. In the case of librium, the Italian firm sells the raw material at Rs. 312 per kilo while the associates of the foreign firms charge Rs. 5555 per kilo—1800 per cent more; So, their librium is costlier. So, this is our experience during the 19 years as a result of the patent law given to us by our big emperors. Let us wait for 10 years. Let us put the patent law out and take the challenge from your young scientists and technologists and see how far they can go.

Shri Bibhuti Mishra: You are not in favour of patents. Then, what is your plan to develop medicines and drugs in India?

Shri I. A. Modi: We have not said that the Patent Act should be abrogated. We endorse this Bill. What we say is that this patent protection should not be restricted to the pro-

duct, it should be restricted to a process only. If this is done, then our scientists will think of different processes than the one which is patented. In that way we will be able to produce the product which has already found use in the world. Like that our country will flourish, our scientists will flourish and we will have some kind of equipments. Now we are not allowed to think of other processes. We are discouraged in the initial stages itself.

Shri Bibhuti Mishra: Do you mean to say that by this method the price will be cheaper?

Shri I. A. Modi: Hundred per cent. We are already marketing a product at a cheaper price Diatol, which is like Tolbutamide, we are supplying at Rs. 35 per 1000 whereas the other one is being sold for Rs. 175. Librium, they sell at 18 paise per tablet whereas the Indian manufacturer is selling it at only 6 paise. There is Lidocane which is just like Zilocane. We are selling it at Rs. 170 per Kg. whereas Geigi are sell it at Rs. 866. These foreign manufacturers also help each other. When Lidocane was offered at Rs. 170 one foreign manufacturer in India refused to have it just to discourage the Indian manufacturer.

Shri Kashi Ram Gupta: You have said in your memorandum that India is still in its initial stages of progress and till it reaches a satisfactory stage of development we should follow the Patent Law of Japan. The latest Patent Law of Japan is of the year 1959. That law provides a period of 15 years. So far as Italy is concerned it has recommended a period of 10 years. Russia also has got a patent law. Now, you have arrived at this 7-year period. You quote Japan, Italy and Russia where it is not a period of 7 years. How have you arrived at this period of 7 years?

Shri I. A. Shah: They tried without patent laws for about 20 to 25

years. Then they came to the conclusion that if the period is kept at 10 or 15 years it would be to their advantage. Here, when we have no chance to develop ourselves even after 7 years, if we can get some clue from the patent then we would be able to do it much faster, and 7 years time is enough for them to make whatever money they have spent because in the initial stages there is no competition and the prices are kept high. The example of Japan has been put in wrongly.

Shri Kashi Ram Gupta: You are quoting Justice Ayyangar's report. Are you aware of the fact that Justice Ayyangar has not supported the view of reducing the period to such an extent?

Shri I. A. Modi: That does not mean I cannot differ from the views of Justice Ayyangar. India is a vast country with a population of 50 crores or more. Any organisation will have ample time within seven years to recover the expenditure. Secondly, we have taken shelter under the Kefauver Committee Report. If, with twenty major Companies, the research expenditure has been 6½ per cent, seven years would be more than sufficient to recover the expenditure. For a country like India, in our opinion, the patent law should be abrogated for a few years, but because we have to get help from others we have suggested that let the period be seven years.

Shri Kashi Ram Gupta: Can you give statistical data to prove this?

Shri I. A. Modi: Let them give their figures; I will justify it.

Shri Kashi Ram Gupta: The other party gives the argument that they spend on research. Do you mean to say that even if they spend on research 7 years will be sufficient, or that they do not spend on research and therefore the period of 7 years is sufficient.

Shri I. A. Modi: Even if they do research, this period of 7 years will be more than enough.

Shri Kashi Ram Gupta: Are you in favour of putting off the pharmaceutical industry, say, for 10 or 20 years on the ground that research in this country will develop as also the basic research?

Shri T. A. Modi: Yes, Sir.

Shri Kashi Ram Gupta: Are you aware of the fact that basic research in India can be done only by Government institutes or some such bodies and not by the pharmaceutical industry as at present?

Shri I. A. Modi: I think everyone can do it with little more resources.

Shri Kashi Ram Gupta: You mean basic research?

Shri I. A. Modi: Yes, Sir.

Shri Kashi Ram Gupta: Are you in favour of basic research being done by institutes other than Government institutes?

Shri I. A. Modi: Yes, Sir. That can be done.

Shri Kashi Ram Gupta: What is the approximate capital expenditure on a research institute?

Shri I. A. Modi: I think the Government should do that. They are doing it.

Shri Kashi Ram Gupta: Therefore, I put the question that only the Government should do that.

Shri Hasmukhlal C. Shah: There are national laboratories. They are all doing research and the application of research can be taken up by all the firms.

Shri Kashi Ram Gupta: Because the Government laboratories are there, basic research can be done there and the pharmaceutical industry can take up other sides of it.

Shri Hasmukhlal C. Shah: Yes, Sir.

Shri K. K. Warrior: The provision of the compulsory licensing is there even under the present Act. May I know how many times you have taken advantage of that?

Shri Hasmukhlal C. Shah: There is a provision of compulsory licensing in the present Act. But nobody has been able to take advantage of that because very few people know the process of having compulsory licence. The process is so cumbersome, so difficult and so time-consuming that a small manufacturer gets fed up with it. He has to go to the courts. You have to go to the High Court, then to the Supreme Court and then you have to have evidence. Who bothers about this? So, the process should be simplified.

Shri K. K. Warrior: Is it your experience or is it your anticipation.

Shri Hasmukhlal C. Shah: It is our experience. About 10 firms in India have been sued by the Tolbuta mide...

Shri K. K. Warrior: You are only relying upon that one instance.

Shri Hasmukhlal C. Shah: That experience is more than enough. Even the biggest firm in India is not able to do anything about that. That case took about 4 years and yet it is in the High Court. It will go to the Supreme Court and it will take another four years. By that time, the patent will be over. That is the process of getting the compulsory licence or something like that. How can a small manufacturer do that?

Shri I. A. Modi: Here, I just want to state a very simple thing. After all, we are just coming up now. May I say it is just like that of a boy of six months there and you say, "I have put the cycle before you. Why don't you walk?". We are just coming up. Unless and until we have our resources, we have our equipments, how do you expect us to run to Calcutta

and put an application for a compulsory licence? Let us come up and you will realise how many applications are coming for compulsory licence.

Shri K. K. Warrior: I am only suggesting that you have not applied for a licence. I do not want the reasons. I only want the facts. I want to know whether you have made an application or not and whether you have got the experience of the legal difficulties or obstructions following that application.

Shri Hasmukhlal C. Shah: We have got the experience.

Shri I. A. Modi: We both had it.

Shri K. K. Warrior: I wish to know whether now those obstructions will not be there according to the provisions provided in the present Bill. Are you satisfied with that?

Shri Hasmukhlal C. Shah: Yes, Sir. We want to make it a little easier. We have suggested that after the making of the application, if no result is coming up, if no reply comes, then, automatically after six months we can start the manufacture.

Shri K. K. Warrior: I wish to know whether at the present stage of our know-how, we have reached a stage when we can take full advantage of this provision of compulsory licensing.

Shri Hasmukhlal C. Shah: We will be able to do it. As I told you, we have got two or three products already made. The patent is already there. The Suhrid Geigy sells for Rs. 858 and I can sell for Rs. 172 and yet there is no buyer. There is a syndicate of foreigners. They do not want Indians to come up.

Shri K. K. Warrior: In the provision of royalty, do you also agree to include the necessity of handing over the know-how?

Shri I. A. Modi: I have already said that.

Shri K. K. Warrior: You want 4 per cent or you are in a mood to give something more.

Shri I. A. Modi: It should be included in 4 per cent. That is more than enough. Morally, they are expected to give everything to the patent office.

Shri Hasmukhlal C. Shah: If a patent is taken only for a process he has to mention it. Then the know-how question will not arise.

Shri K. K. Warrior: If it is only for one single process for a product, do you think that will be a sufficient guarantee of protection for our scientists and inventors who are now coming in the field.

Shri Hasmukhlal C. Shah: 19 years' experience has shown that no Indian scientists has come forward by having this protection.

Shri K. K. Warrior: You must see not only from your own firm's point of view but from the point of view of the developing economy, developing of our scientific and technical knowledge and also possibility of opening of our petro-chemical industries and other basic industries. In view of that, do you think that this will be sufficient protection if it is only for one single process for a product.

Shri I. A. Modi: Yes, Sir. If a man is very particular, he may have patents for three processes. One patent means one process.

Shri K. K. Warrior: The same person can take as many patents on as many processes he likes.

Shri I. A. Modi: Yes, Sir.

Dr. C. B. Singh: I must accord my appreciation of the spirit underlying the evidence given by them. They have mentioned that for 10 years there should be no patent law. I would like to ask one question. It is better to learn from the experience of others.

Italy had no patent law for drugs and pharmaceuticals. Do you know what was the experience of Italy when they had no patent law at all?

Shri I. A. Modi: Yes, Sir. I would like to draw your attention to the Senator's Report. In that he has mentioned that Italy has no patent law and yet it has developed a chemical substitute for influenza....

Dr. C. B. Singh: Don't use the word 'chemical'. I am talking of the pharmaceuticals.

Shri I. A. Modi: It is a drug; it is a chemically manufactured drug.

Dr. C. B. Singh: Don't confuse the two issues.

Shri I. A. Modi: That drug was manufactured by Italy. It was their original research. An American firm has already made some agreement with them to market it in America. Like that, they have done a good work in the field of anti-biotics.

Dr. C. B. Singh: According to the list of patents for a single product patent in the world, the U.S.A. has got 355 patents, Switzerland—44 patents; Germany—33 patents; U.K.—28 patents, France—21 patents; Japan—3 patents; Italy—1 patent and India—1 patent. That was in the period when there was no patent law in Italy—only 1 patent in Italy whereas U.S.A. having 355 patents. How would you explain that? In the absence of any patent law, there was hardly any real advancement made in Italy in the pharmaceutical field. Do you agree with that?

Shri Hasmukhlal C. Shah: We do not agree with that. If you were in the market for the drugs industry, you would know that they are able to manufacture almost every chemical.

Dr. C. B. Singh: But they were all copying. They were not making anything new.

Shri Hasmukhlal C. Shah: Even by copying, they have developed research and technology.

Dr. C. B. Singh: You will agree that they were copying only?

Shri Hasmukhlal C. Singh: We are copying everything in this world.

Dr. C. B. Singh: I am talking about Italians. They were only copying? Is it not? You are now trying to copy again. You are copying all the time. Is it not correct?

Shri Hasmukhlal C. Shah: We have not been able to copy others because the patent law was against us. We could not do so. That is the reason why we want a recess to copy others.

Dr. C. B. Singh: As a result of no patent, you will be able to produce nothing new.

Shri Hasmukhlal C. Shah: Italy could manufacture so many things and they have been able to reduce the price of drugs.

Dr. C. B. Singh: You are again harping on the same point. They have been able to reduce the price because of copying others. Nothing new was produced by them.

Shri Hasmukhlal C. Shah: May I ask: By having the patent law for 19 years, what have we achieved?

Shri Kashi Ram Gupta: That is not the way of answering questions. The witness should not ask the question that way.

Shri Hasmukhlal C. Shah: I ask During the last 19 years what have we achieved by keeping this patents law?

Dr. C. B. Singh: Nothing. That is the greatest tragedy. What have you done in that regard?

Shri Hasmukhlal C. Shah: Let us now try that without the patent law We should learn by trial and error.

Shri I. A. Modi: Let me quote from Senator Kefauver's Report:

"The Italian drug industry has also developed a number of possibly significant new drugs most of which are not available in the United States. Among these are several new anti-biotics, new anti-cholesterol drugs, new anti-fungus drugs, new ergot derivatives useful in easing child-birth, a new injectable chlorophenicol and a synthetic chemical which gives some promise of being effective against two strains of influenza. The significance of the last lies in the fact that influenza has a virus against which neither anti-biotic nor any other drug is effective. This new drug is being tested in over 100 hospitals in Italy; it is claimed to reduce the average length of illness by more than half and a leading American firm has already secured distribution rights in the United States.

It should be recognised that some of these developments are only in the nature of possibilities for the future. The Italian drug industry is largely a creation of very recent years."

Dr. C. B. Singh: Do you know what was the ultimate result of this Report in U.S.A.?

Shri I. A. Modi: That I do not know.

Dr. C. B. Singh: I may tell you for your information.

Shri I. A. Modi: These are the facts. Italy has done research in this field.

Mr. Chairman: Why tell them that. We know it.

Dr. C. B. Singh: They may not know it at all. They are quoting from this Report. I want them to know what was the ultimate result of that. A member of the Committee said:

"It has been my judgment that the hearing so far has been pre-

judiced and distorted. They have lacked balance; they are unfair to the industry, to Government agencies, to the Senate itself and to the public."

Mr. Chairman: Do you justify that attitude?

Dr. C. B. Singh: I do not justify it.

Mr. Chairman: Then why I ask that?

Dr. C. B. Singh: They are quoting from that.

Shri Hasmukhlal C. Shah: We are quoting the facts alone.

Dr. C. B. Singh: They have, more or less, brought about cases in the court about drugs used for conditions four main types of that is, anti-biotics, anti-diabetic, anti-rheumatic and anti-sedative. These cases are still going on in the country.

May I know what is the proportion of patented and un-patented drugs used in this country?

Shri Hasmukhlal C. Shah: I don't know. The hon. Member may give the percentage.

Mr. Chairman: If you do not know, say so. That is all.

Dr. C. B. Singh: I know you have no idea about it. About your own firm, how many unpatented drugs are you sending out?

Shri Hasmukhlal C. Shah: Almost hundred per cent. Because of this patent law, we cannot manufacture any product.

Shri Arjun Arora: You have suggested that the patent law should be abrogated for 10 years. Do you think the drug industry in this country will be able to achieve self-sufficiency in 10 years?

Shri Hasmukhlal C. Shah: This was only a mere suggestion.

Shri Arjun Arora: It was a good suggestion.

Shri Hasmukhlal C. Shah: If nothing can be done by having this patent law, at least give a holiday. That is what we suggested. Then, we can try our luck.

Shri Arjun Arora: Do you think Italy achieved self-sufficiency or near self-sufficiency in drugs during the 19 years that they have had no patent law?

Shri Hasmukhlal C. Shah: Not only self-sufficiency but they are feeding the world itself.

Shri Arjun Arora: So, do you think that Indians could do the same?

Shri Hasmukhlal C. Shah: I think so. We are 15 times more in number than they are. We will be able to do much better if the opportunity is given to us.

Shri Arjun Arora: How do you think abrogation of the Patent Act will act as an incentive for research?

Shri Hasmukhlal C. Shah: I think, you are misunderstanding us. We have never said that we want the abrogation of the Patent Act.

Shri Arjun Arora: You may not want it, but I want to know whether abrogation of the Patent Act will act as an incentive for research and whether research will gain momentum thereby.

Shri Hasmukhlal C. Shah: We have asked only for a compromise. If compulsory licence is easily available, abrogation of the Patent Act is not necessary at all, because that will serve both the purposes. It will satisfy those who want patents and also those who do not want patents.

Shri Arjun Arora: Those who try to satisfy both ends in satisfying nobody.

Shri I. A. Modi: As far as we are concerned, we feel that instead of total

abrogation, the present Bill will be more appropriate and more encouraging. Abrogation will not work; this Bill will work. That is our opinion.

Shri Arjun Arora: You mentioned the Italian example. Could we not imitate the Italians by not having patent legislation? You said that not only the Italians achieved self-sufficiency but they captured the world market; so, you wanted a holiday from patents.

Shri Hasmukhlal C. Shah: We have learnt from the Government's experience. The Government itself has given a holiday from income-tax for certain industries thinking that that would act as an incentive. So, we would like to have the same thing in regard to patents. The same arguments, which have been given by Government for giving a holiday from income-tax, would apply here.

Shri Arjun Arora: You have made a good suggestion that the date on which a patent is registered originally should be the date from which patent rights should begin in India also. Did you have an idea of the time-lag between the date of the original patent and that of the patent in India?

Shri Hasmukhlal C. Shah: Yes, Sir. It varies from two to three years; sometimes it is anything from 5 to 7 years.

Shri Arjun Arora: Have you come across any example of a patent being granted in India five years after it was originally granted anywhere else?

Shri Hasmukhlal C. Shah: At the moment I cannot remember any such example.

Shri Arjun Arora: Would you look up and send it to us?

Shri Hasmukhlal C. Shah: I will try to find out and, if there is any, send you the information.

Shri Arjun Arora: Is there any scientific basis for fixation of royalty

or is it merely a matter of bargaining between the patentee and the licensee?

Shri Hasmukhlal C. Shah: If the expenses on research are $6\frac{1}{2}$ per cent, 4 per cent is more than enough.

Shri Arjun Arora: Do you agree that there should be a progressive reduction in the amount of royalty?

Shri Hasmukhlal C. Shah: We would be very happy if that could be done through this Bill. We will appreciate it very much.

Shri A. T. Sarma: In your memorandum you have cited many instances of foreigners exploiting and harassing Indians. Do you consider that by the passing of this Bill this exploitation or harassment of Indians will be restricted in future?

Shri I. A. Modi: Yes, Sir. If this restriction goes, our country will get the drugs and medicines much cheaper than what they are available for today.

Shri A. T. Sarma: Do you think that India is not lacking in technology and technicians in the pharmaceutical industry?

Shri I. A. Modi: India is not lacking in that. Even in the foreign firms, here most of the employees are Indians. They have enough qualifications. The only thing is that we are waiting for opportunities.

Shri A. T. Sarma: Do you know that even foreign firms in India are run by Indian technicians?

Shri Hasmukhlal C. Shah: Yes, Sir. They are run 100 per cent by Indian technicians. There may be one or two exceptions here or there.

Shri I. A. Modi: But, may I add, that even these Indian technicians are restricted by foreign tactics. I have one example of a friend of mine. What is being done by the foreign firm is this. My friend is working on one

project. That project seemed to have wonderful prospects; so, the man was immediately transferred to another project and that project has been transferred to their country. It is not now being worked in India.

Shri A. T. Sarma: Some foreign witnesses have expressed the desire that the Bill be postponed for the time being. Do you agree with that?

Shri I. A. Modi: No. The Bill should not be postponed even for a day. The move may be there; in fact, the *Economic Times* of July 9 in its editorial said "the recent re-thinking in New Delhi has rightly placed the emphasis on the factors mentioned against the Bill and there is no reason why some realistic approach should not be applied to patents." A nice rumour is there.

Shri R. P. Sinha: Have the witnesses visited the Pimpri factory at Poona?

Shri Hasmukhlal C. Shah: Yes, Sir.

Shri R. P. Sinha: Do you know what they are manufacturing?

Shri Hasmukhlal C. Shah: If we do not know all of it, we know something about it.

Shri R. P. Sinha: Do you know that they have produced a new drug, known as Haemycin?

Shri Hasmukhlal C. Shah: Yes, Sir.

Shri R. P. Sinha: Do you know what is their cost of production?

Shri Hasmukhlal C. Shah: I do not know.

Shri R. P. Sinha: It is Rs. 20,000 a kilo. Now if we give you the freedom that you want, that is, the freedom to copy, it will mean that the money invested in Pimpri and at other places will go waste. Do you want that it should be allowed to go waste?

Shri Hasmukhlal C. Shah: We do not want that it should go waste. Whatever expenses they have incurred, they should realise that.

Shri R. P. Sinha: How can they realise it if you have complete freedom to copy it?

Shri Hasmukhlal C. Shah: The technology is known to them much better than to the person who is coming new in the field; so, they would be able to do much better than the newcomer and by the time the new comer achieves that technology, they would have realised all their money spent on research.

Shri I. A. Modi: May I say that under this Patent Bill no expense is waste because we are paying royalty. If there are more agencies for making haemycin, perhaps they will get more compensation by way of 4 per cent than they are getting today by producing it themselves and selling it. We do not wish just to copy and not to pay the royalty. We want that royalty should be paid and will be paid.

Shri R. P. Sinha: Do you know what royalty they are getting from other countries?

Shri I. A. Modi: No.

Shri R. P. Sinha: They are getting 7½ per cent.

Shri I. A. Modi: In that case, if Indian restricts it to 4 per cent it is very reasonable.

Mr. Chairman: How can you permit Pimpri to get 7½ per cent if you want it to be fixed at 4 per cent in India?

Shri I. A. Modi: It is for people in those countries to object to 7½ per cent and say that they will give only 4 per cent.

Mr. Chairman: You want Pimpri to get only 4 per cent?

Shri I. A. Modi: I do not want it. It is not that we are going to tell him, "please give 4 per cent or 5 per cent". When those people are conscious of that, I think they will have to do.

Mr. Chairman: You cannot have one standard for one and another for the other.

Shri I. A. Modi: I do not say that. On one item you may lose 3½ per cent, but on thousand other items, you may gain. Patent law is a reciprocal law.

Shri Hasmukhlal C. Shah: If they ask 7½ per cent in their country, they have to pay 7½ per cent in our country. If we pay 4 per cent to them, they would pay 4 per cent to us.

Mr. Chairman: If you pay only 4 per cent, what is the justification for you to ask another country to pay you 7½ per cent?

Shri I. A. Modi: They may be demanding 7½ per cent. The justification is. . . .

Mr. Chairman: This is a matter which this Committee has to consider?

Shri I. A. Modi: Yes; naturally.

Shri Bade: About those patents which are running in foreign countries, their period should be counted by counting the period in India. If you look to Section 53, we have envisaged that thing also. The term of every patent granted shall:

"(a) in respect of an invention claiming the method of process of manufacture of a substance, where the substance is intended for use, or is capable of being used, as food or as a medicine or drug be ten years from the date of the patent; and

(b) in respect of any other invention, be fourteen years from the date of the patent.

"(2) Notwithstanding anything contained in the Patents and Designs Act, 1911, or in the patent granted thereunder, the terms of every patent granted before the commencement of this Act in respect of an invention claiming a substance or the method or process of manufacture in respect thereof, where the substance is intended for use, or is capable of being used as food or as medicine or drug shall be ten years from the date of the patent:

Provided that where at the commencement of this Act any such patent is in force by reason of an extension granted under the Act aforesaid, the patent shall cease to have effect on the expiration of the period of such extension."

And then all those patents granted for drugs and medicines, will be endorsed with "licences of right" automatically, i.e. automatic licensing.

Shri Hasmukhlal C. Shah: We fully agree with that automatic licensing.

Shri Bade: All the foreign patents will not be given licences.

Shri Hasmukhlal C. Shah: As far as drugs and medicines are concerned.

Shri Bade: About drugs and medicines, there is no question. The unexpired term of the basic foreign patent should be there, but not more than ten years.

Shri I. A. Modi: We have not studied that particular clause. So it is very difficult to express our opinion.

श्री चौरङ्गिया : आप चाहते हैं कि पेटेंट पीरियड सात साल रखना चाहिए। आप जानते हैं कि हमारे देश में अभी तक विकास नहीं हो पाया है। विकास की सम्भावनाओं को देखते हुए और इस बात का ध्यान रखते हुए कि खोज करने वाले को खोज करने के खर्च का उचित मुआवजा

मिल सके क्या आप सात वर्ष की अवधि को पर्याप्त समझते हैं ?

Shri Hasmukhlal C. Shah: Looking to the population of this country, seven years are more than enough.

श्री चौरङ्गिया : क्या यह सही नहीं है कि अगर पेटेंट पीरियड साल सात रखा गया, तो उसका बहुत बड़ा हिस्सा तो पेटेंट कार्यालय का चक्कर लगाने और क्लिनिकल टैस्ट में व्यतीत हो जायेगा और एक दो वर्ष एडवर्टाइजमेंट में लग जायेंगे और इस तरह पेटेंट पीरियड समाप्त हो जायेगा ?

Shri I. A. Modi: It is not the case with every patent. All the things go simultaneously. Perhaps he may recover the cost within three years. In seven years, he will be able to recoup even extremely high expenses.

श्री चौरङ्गिया : क्या आपको स्वयं, अथवा आपके किसी मित्र को, ऐसा अनुभव है कि पेटेंट कार्यालय में प्राथनापत्र देने के बाद कितने वर्ष बाद पेटेंट ग्रांट किया गया ?

Shri I. A. Modi: We have no experience.

Shri Hasmukhlal C. Shah: It will be better if you suggest in the Bill how quickly the patent should be granted, so that the time factor will not be there.

Shri B. K. Das: You are in favour of Clause 48. That is what you have said in your Memorandum. But no compensation has been provided. Have you any comment to make on that?

Shri I. A. Modi: My only comment is that, after all, the drugs are to be used for national interest. We can give you the example of the U.K. Act here. If it is to be used for government purposes, naturally no compensation is to be given. If such a well developed country wants it to be so, why should we not want it? There

should be no compensation if it is used for government purposes.

Shri B. K. Das: Some opinion has been expressed that it should be restricted to Defence purposes, security of the country, epidemic and such other things and should not be applicable for general government use, for instance, in hospitals. What have you to say on this?

Shri I. A. Modi: It should be for public at large and for all government purposes.

Mr. Chairman: That is all.

Thank you, gentlemen.

(The witnesses then withdrew.)

(The Committee then adjourned to meet again at 17.00 hours)

(The Committee reassembled at 17.00 hours.)

III. Gujarat Vepari Mahamandal, Ahmedabad.

Spokesmen:—

1. Shri Chandulal Premchand.
2. Shri Charandas Haridass.
3. Shri J. T. Trivedi.

(The witness were called in and they took their seats.)

Mr. Chairman: Gentlemen, The evidence you give will be published and given to all our Members and laid down on the Table of the House and also will be given to all Members of Parliament and even if you want any portion to be kept confidential, that will also be printed. We have received your memorandum and if you want to put forth any new points or elaborate any points already made, you are free to do so. Afterwards, our members will ask questions.

Shri Chandulal Premchand: At the outset we would like to express our regrets that we could not come in

time as our train was late beyond our imagination.

We would like to draw your attention to our memorandum. *Clause 3(a)*: Here, the word 'scandalous' in the old Act is proposed to be substituted by the word 'frivolous'. We fear that the word 'frivolous' may not convey the meaning as is supposed or as is conveyed by the word 'scandalous'. Perhaps the authorities may consider any invention which may seem to be small as frivolous and reject it. The executive authority should be very careful in rejecting an invention and we desire that the executive power should be limited to rejecting those inventions which are against morality or society. We have, therefore, suggested for want of any better word that the word 'scandalous' as in the present Act be kept in the bill though we feel that the meaning of the word 'scandalous' is conveyed in clause (b).

Now turning to page 4 of our memorandum—clause 102(3) regarding the compensation for compulsory acquisition of patent by Government, in the Bill discretion has been given to the executive authority to determine the compensation to be paid to the patentee. There is every likelihood that the officer will use the judgment in favour of the Government and to that extent against the patentee. So we have proposed that there should be an independent board to determine the compensation to be paid to the patentee instead of Government deciding in favour of the Government.

About clause 126, with reference to the practitioners, Mr. Trivedi will explain the position.

Shri J. T. Trivedi: Clause 126 is specially meant for the recognition of patent attorneys. In this context, the idea conveyed is that a man who wants to get himself registered as a patent attorney or agent should be an advocate and

also he should have a degree in science or technical qualifications. These three things are practically not possible so far as our country is concerned. Even Judges in the Supreme Court do not possess engineering and law degrees. Even in other countries you will find that none of the jurors possesses both engineering and law degrees. These two are different subjects altogether. It can't be said that this is a technical subject and a man having no degree cannot possibly practise himself in drawing the specifications of the claim. It is a practical thing. Therefore there should be only this provision that those who are practising in this field should be given recognition. Just like chartered accountants, there should be a training institution for them and thereafter this clause for compulsory degree should be introduced. In U.K. also this system was introduced very late. First persons who were practising in that particular field were granted recognition. After some time, an institution was started to give them training and now they have provided that only those who are well-versed in that particular field through training would be allowed to practise. But in our country we have not got that type of institution so far. Therefore, it is necessary that those who want to practise in this particular field be given a fair chance. We have got a very small number of practitioners in the patents field. It will be hardly 39 or 40 throughout India and looking to the population of the country, this figure is very small and none of these practitioners possesses the degrees that are specified in the proposed Bill. Therefore, my submission is that this provision should be relaxed for some time so that this can be introduced when the proper time comes. For the time being they may be given recognition and after some time a patents examination may be held and if they pass the examination they could be given a certificate to that effect and allowed to continue practice.

Shri R. P. Sinha: What interest do you represent?

Shri Chandulal Premchand: The Gujarat Chamber of Commerce. It represents trade and industry in Gujarat. The members are not located only in Ahmedabad but are scattered all over the important places of Gujarat. The total membership is 2,500.

Mr. Chairman: Have you any pharmaceutical industries on your body?

Shri Chandulal Premchand: Yes, Sir, about 10.

Mr. Chairman: Have you obtained their views about this Patent Bill?

Shri Chandulal Premchand: Yes.

Mr. Chairman: About your other industries?

Shri Chandulal Premchand: We have not been able to obtain their views.

Shri R. P. Sinha: Ahmedabad is a centre of textile industry. Is the textile industry in any way affected by this Bill?

Shri Chandulal Premchand: It does affect, because they are making use of patented articles and they are the users to a large extent of patented processes of foreign patentees.

Shri R. P. Sinha: Then they pay royalties to the foreigners?

Shri Charandas Haridass: Yes, we are paying royalties; for example for the Sanforized process.

Shri R. P. Sinha: What is the amount of royalty you pay for the Sanforized process?

Shri Charandas Haridass: About Rs. 50,000 to Rs. 75,000 per month per unit.

Shri R. P. Sinha: The patent belongs to which country?

Shri Charandas Haridass: It is an American company.

Shri Chandulal Premchand: The Sanforizing machine is rented to these people by the patent-holders and per metre of cloth that they Sanforize, they have to pay so many paise as royalty, and it comes to about Rs. 50,000 per month for a medium-sized unit.

Mr. Chairman: How many units are there?

Shri Charandas Haridass: There are 60 units in Ahmedabad. All of them do not use this Sanforized process. Only about 25 mills use it.

Shri R. P. Sinha: Is it possible for your Association to send us some more details as to the quantity of the sanforized textiles that are being produced in the country and the exact amount of royalty being paid. For how many years the patent is their? What are all the terms of this?

Shri Charandas Haridass: Yes, Sir.

Dr. C. B. Singh: One process alone and Rs. 3 crores and 60 lakhs per year?

Shri Chandulal Premchand: Some of the mills have entered into agreement with the British Tootal process. Some of them have started working it. Perhaps, the royalty demanded by the Tootal processors must be higher than the sanforized.

Shri R. P. Sinha: Will you send us the data for that also?

Shri Chandulal Premchand: Yes, Sir.

Shri R. P. Sinha: I would like to know one thing. These Tootals and Sanforized must have taken the patent in India.

Shri Chandulal Premchand: Yes, Sir.

Shri R. P. Sinha: I would like you to make sure, whether they are getting the royalty as a patent from the patent that has been registered here or is it a royalty for the know-how and technique that is given or the rent of the machine? We would like to know definitely what is the element of royalty for the payment of the patent rights. You understand my point.

Shri Chandulal Premchand: I will just repeat. You want to know whether this royalty is in compensation for the know-how or the machine or for using the word "Sanforized" on every piece of cloth.

Shri R. P. Sinha: Quite right. If it is something else, then we are not concerned. If it is patent, then we are concerned. Kindly give us the Patent No. We can check up whether it is a perfect patent or not.

Shri Chandulal Premchand: All right.

Mr. Chairman: I am told that the patent period is over. It is only for the trade mark that you are paying.

Shri J. T. Trivedi: Sanforized patent is still in force for the process. That has been patented in 1954. It has about two years to expire. However, I will give the details about this on my return to Ahmedabad.

Mr. Chairman: Please give us the details about both.

Shri R. P. Sinha: Please give us the patent number. Please let us know if there are other types of patents which the textile industry in Ahmedabad are using.

Mr. Chairman: I think the textile manufacturers even in Bombay have to pay this royalty.

Shri Charandas Haridass: Throughout India, Sir. Any mill who wants to us this sanforized process has to pay the royalty.

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Shri R. P. Sinha: If we get the details, we can have some idea. We can refer it to the All India Textile Federation.

Mr. Chairman: Can you give us what textile industry in India—including all places, is paying for this trade mark or patent whatever it is?

Shri Chandulal Premchand: I think we shall be able to give it. Through the Federation, we can get all these figures.

Shri J. T. Trivedi: Regarding the sanforized process, Sir, some machines like Eva Set are being manufactured in the U.K. which are available for Rs. 2½ lakhs. In West Germany, the machine known as Manfores is available at a cost of Rs. 2 lakhs, whereas in the U.S.A. we have to pay a cost of Rs. 4 lakh and 50 thousand. That is the position.

Mr. Chairman: Why should they not manufacture in India?

Shri J. T. Trivedi: Tootal & Company have got a contract with the mills likely to expire in 1967. They are trafficking in it and Government has allowed them to take away this large money from our country.

Shri R. P. Sinha: Please differentiate between trade mark and patent. We are not concerned with the trade mark. If this particular machine has got a patent for the manufacture of sanforized products, we would like to know the patent number of this machine. The point raised here is that this patent for this machine has already expired. We would like to know, as you have said, that this machine is available for four lakhs in America and 2 lakhs in West Germany and England and probably because of this patent you can neither manufacture the machine here nor can you import from West Germany. Please send us a comprehensive note on this subject.

And please tell us if there are other patents for products or process that are being used in the industries at Ahmedabad—whether textile or oil or anything else?

Shri Chandulal Premchand: The word "Sanforized" has been so popularised by the patentees or by the holders of the trade mark and the consumer preference has been so much created that textile mills even if they stabilise another process almost similar to it, will not fetch that price. At the same time, it will not be so easy of sale, because the manufacturers and the patent holders have so popularised it—they spent lakhs and lakhs of rupees to popularise the word "Sanforized" that textile mills, even if they like it or not, would pay this high royalty. They have to use it and they have to sanforized it.

Shri R. P. Sinha: It is borne out of our own experience. And one thing more. This textile industry is a very very old industry of India and particularly in Ahmedabad. Could you please tell us whether the textile industry in India has taken out some patent in respect of certain processes or something which they can claim as a result of their own experience? Any such innovation?

Shri Chandulal Premchand: Yes. There is one process which is "Trinised", which has been invested by ATIRA, the Ahmedabad Textile Re-Industrial Research Association, whereby the cotton cloth can be processed as to wash and wear. At the same time, it maintains the softness and airiness of the cotton cloth. Others are using synthetic resins to make it "wash and wear" and to avoid ironing. This process has been invented after so many years of research by the chemists of ATIRA, and they have asked for patent.

Shri R. P. Sinha: They have taken the patent in India?

Shri Chandulal Prem Chand: Yes, Sir.

Shri R. P. Sinha: When was it taken?

Shri J. T. Trivedi: It was somewhere in January '65.

Mr. Chairman: Any foreign country has taken the patent?

Shri J. T. Trivedi: I do not remember, but I can furnish this information after my return.

Shri R. P. Sinha: Please give us particulars about the number of cases where they have taken patents for themselves, and whether the process is being used in any of the mills in India.

Shri Chandulal Premchand: Some of the mills in Indore, Bombay and Ahmedabad have started using this process by paying royalty to 'ATIRA'.

Shri R. P. Sinha: What is the royalty paid?

Shri Charandas Haridas: Rs. 7,500 per year.

Shri Chandulal Premchand: That is the minimum.

Shri R. P. Sinha: What do you mean by the minimum?

Shri Chandulal Premchand: It depends upon the use they make on the metre, of cloth but the minimum is this amount.

Shri R. P. Sinha: There must be some royalty based on metre also. Could you tell us that figure?

Shri Chandulal Premchand: We shall furnish that information.

Shri R. P. Sinha: I would like to compare this with the royalty per metre on sanforized cloth. Could you also tell us how many years it took for the ATIRA to evolve this process, and what expenditure they had to incur in order to evolve this process?

Shri Chandulal Premchand: They worked for about three years. The primary function of the ATIRA is to study the problems of the mills which are sent to them for study and then suggest solutions. In addition to that, there were scientists who work on this also; after finding that the consumers want a type of cloth on which they could be saved from the trouble of ironing, they began to work on this, using only the cloth without adding any synthetic resin or any other foreign material.

Shri R. P. Sinha: Kindly send us a note on the function of the ATIRA and what new processes they have tried to evolve, the expenditure per year, and how it is being financed.

Could you tell us about the patents in regard to engineering goods or engineering products?

Shri Charandas Haridass: We have started one factory in Ahmedabad, which manufactures printing machines; they have secured a patent also; and that machine is being sold at present at the cost of about a few lakhs of rupees. It is a special type of machine for vertical printing; it is for printing on cloth.

Shri R. P. Sinha: You have taken a patent for that also?

Shri Charandas Haridass: Yes.

Shri R. P. Sinha: Are you selling it abroad?

Shri Charandas Haridass: Not abroad; but we are selling it in Bombay, Indore and Calcutta.

Shri R. P. Sinha: Please send us some more details showing how much it costs, how it was evolved, the royalty obtained, when this patent was taken etc.

Since you are doing so many things to solve your problems at the ATIRA, and you have also got the problem of royalty, the problem of giving as well as taking of royalty etc., I would like to know whether you have applied your mind to the question of what the period of the patent should be, what royalty should be provided for and so on, so that your interests or the Indian interests are protected both from the point of view of not being exploited by a foreign patentee and also from the point of view of getting protection for your patents here so that you can evolve more new patents for improving the production of textiles and other items here and you could get proper return on the investment that you make in evolving new patents. If you have examined these questions, kindly let us know what your views are.

Shri J. T. Trivedi: In that context, I would like to submit that usually, the grant of a patent takes about a period of three years. After that, the patentee has to set up the machinery for working it, and then organise a market for it and then sell the machine to the prospective clients; the period of 16 years provided for in the present Act has been found to be not sufficient in some cases. In any case, it should not be reduced, and this should be ensured in order that we may recover the amount that is spent on labour, in organising the factory etc.

Dr. C. B. Singh: What is this period of 16 years?

Shri J. T. Trivedi: 16 years is the period provided in the present Act.

In the new Bill it has been reduced to 14 years. That period of 14 years should be from the date of sealing of the patent and not from the date of application, because between the date of application and the grant of the patent, it generally takes about three years; that is the natural course, and that is what we have experienced also. During these three years, one cannot start the factory; one may not get a financier to help one and so on. Therefore, some latitude should be given in this regard, because we are a developing country and we have to develop so many things. In regard to patents for items other than medicines and food articles, the period should not be reduced.

Shri R. P. Sinha: What do you mean by 'financier'?

Shri J. T. Trivedi: The inventor may not have the necessary money and he may have to find out a financier who would assist him to work out his invention, and start the factory.

Shri R. P. Sinha: We have provided for a maximum royalty of 4 per cent. Will that be sufficient, for instance, in the case of the printing machine developed by the ATIRA?

Shri J. T. Trivedi: I have not applied my mind to that question.

Shri R. P. Sinha: Will you kindly consider the question from the angle that I have put before you and then give us a memorandum on that aspect?

Shri J. T. Trivedi: Yes, I would consider it and then give you a note.

Shri R. P. Sinha: If necessary, you can consult your executive committee also and then give us the note.

Shri Chandulal Premchand: After consulting the committee we shall be presenting our views before you.

Shri R. P. Sinha: Both on the royalty question and also on the life of a patent.

Shri Chandulal Premchand: So far as the period of ten years is concerned, we have already more or less agreed on that. But on the question of royalty we shall certainly give our views after considering the matter.

Shri B. K. Das: At page 4 of your memorandum you have suggested some further addition to clause 87. You want to add the words 'any substance, method or processes which the Central Government may notify in the future'. I want to know what particular substance you have in mind. Could you give us some idea of that?

Shri J. T. Trivedi: No; in clause 87 we have made out for which particular substances a patent may not be granted after a particular time. In this connection, I would invite your attention to the wording of clause 87. I would like to submit in this context that we have not exhaustively stated the various substances which are there in India which Government may think it proper in the interests of the country to put in this category. Therefore, there should be a provision that at any time Government may notify in the Gazette of India any particular substance as coming within this category, so that the patent may not be granted for that substance or it may be endorsed with the words 'Licence of right'.

Shri B. K. Das: I only wanted to know whether you have any particular substance in your mind except chemicals for which there is special provision?

Shri J. T. Trivedi: For the present I have not anything in my mind but this clause should be kept open and it may cover very many substances.

Shri B. K. Das: You want an independent statutory body like a Board

for fixing up the compensation. What would you like to be the composition of such a Body?

Shri Chandulal Premchand: We have suggested an independent Board, viz., a Board of Trade set up by the Central Government consisting of the nominees of that particular trade for determining such compensation having regard to the expenditure incurred in connection with the invention and in the case of a patent, the term thereof.

Mr. Chairman: You want that there should be a Judge; a nominee of the Trade and a lawyer. Is it so?

Shri B. K. Das: And the Appeal should lie in the High Court.

Shri Chandulal Premchand: Yes, Sir.

Shri Kashi Ram Gupta: On the questions put up by hon. Member, Shri Sinha, you have given very valuable information but the same could also have been put in the memorandum. May I know what prevented you from putting all this information regarding royalties and new inventions in the memorandum?

Shri Chandulal Premchand: We have simply to express sorrow on that account.

Shri Kashi Ram Gupta: You know the Bill provides a rate of royalty on percentage basis. Now you have informed us that royalties are taken per meter. How the two are to be reconciled?

Shri Chandulal Premchand: For sanforized cloth it is on the meter.

Shri Kashi Ram Gupta: When the patent is granted the clause on royalty is on percentage basis. Then naturally they should conform to that only. How it can be on meter basis?

Shri Chandulal Premchand: We are stating a fact how royalty is demanded when a contract has been entered into between the owner and the user.

Shri Kashi Ram Gupta: My request is you should see to the patent conditions also whether the patent conditions are putting down rate of royalty on percentage basis or meter basis?

Shri Chandulal Premchand: We shall enquire and submit that information.

Shri Kashi Ram Gupta: Now, you know this Bill provides 14 years following from the date of completion of specification. I want to know what is the practice i.e. whether machinery industry generally give their applications with complete specification or it takes time to complete the specification.

Shri J. T. Trivedi: Usually they do not file complete specification at the time of filing the application. They file the application provisionally in most of the cases. Only in few cases they put in application along with complete specification.

Shri Kashi Ram Gupta: Therefore, according to the new Bill the period naturally comes to about 15 years because it is from the date of completion of the specification.

Shri J. T. Trivedi: That is, no doubt, correct, Sir, but even after submission of complete specification there will be examination, etc. which will take time.

Shri Kashi Ram Gupta: That is covered by 14 years. In the old Act it was from the date of filing and now it is from the date of complete specification.

Shri J. T. Trivedi: That I do agree.

Shri Kashi Ram Gupta: Have you consulted the pharmaceutical industry about 10 years period or not?

Shri J. T. Trivedi: I have not consulted.

Shri Kashi Ram Gupta: Finally, have you anything to say about the clause regarding revocation?

Shri J. T. Trivedi: No, Sir, I have not got anything to say.

Shri Kashi Ram Gupta: Do we take that other clauses of the Bill are agreeable to you?

Shri J. T. Trivedi: Except the few points I have mentioned and submitted in the memorandum sent by the Mahamandal.

Shri K. K. Warrior: I wish to know from the hon. witness how many patents held by foreigners have come in the way of our developing the process of textile industry in India?

Shri J. T. Trivedi: As a matter of fact I have not come across such cases personally but I know that so many patents come in the way because our country is a developing country and most of the people look to the foreign stuff and when we develop that idea and go in for a patent we are not allowed because already these are lying on the shelves of the Patent Office and it amounts to prior publication and, as such, so many foreign patents come in our way. But we cannot give exact number and idea about them.

Shri K. K. Warrior: How many patents infringement cases have been there in the textile industry to your knowledge?

Shri J. T. Trivedi: As a matter of fact only one case was filed in 1961 regarding an infringement of a spinning machinery under the patent.

Shri K. K. Warrior: Whether any of the patent right held by foreigners has come in the way of developing our textile machine building industry?

Shri K. K. Warrior: How far the textile industry as such is spending out of their resources for research in textile technology? What percentage of the turnover?

Shri J. T. Trivedi: That is not practically possible for us to say. As far as I know, the Ahmedabad Textile Industry Research Association is carrying out research on behalf of the textile industry, and they are assisting the people. Information can be obtained and supplied.

Mr. Chairman: You have some textile institute in Bombay?

Shri Charandas Haridass: Yes, Sir.

Shri K. K. Warrior: Have you fixed any percentage of the turnover?

Shri Charandas Haridass: The rate is based on loom basis with every mill. The average is Rs. 3000 per year for an average unit.

Shri K. K. Warrior: Only the weaving mills have to contribute?

Shri Charandas Haridass: No, Sir. Both the weaving and spinning mills have to contribute.

Dr. C. B. Singh: When on one item alone Ahmedabad is paying Rs. 3 crores and 60 lakhs, I am sure the Ahmedabad Mills must be using certain chemicals and dyes also—I am sure about it, and this, too, must come to a fairly big amount.

Shri Chandulal Premchand: All the mills are not users of sanforized. Only those which are producing superfine and fine cloth—mostly superfine cloth—are using sanforized.

Dr. C. B. Singh: How the figure of Rs. 3 crores has been arrived at?

Shri Chandulal Premchand: That calculation is not correct. We can collect that information and submit it.

Dr. C. B. Singh: What about chemicals and dyes? I am sure every mill is using lot of chemicals and dyes in bleaching processes and all that? Have you any idea about it, or will you like to give any information about it?

Shri Chandulal Premchand: They are all using dyes and chemicals. There is no patented process for which they are paying. Even for bleaching, sizing and proofing, the processes are well-known. They are using the average colours made by ICI, IDI, etc.

The Ahmedabad Mills are using lot of dyes.

Dr. C. B. Singh: When you send information, will you please send it about these dyes, etc., which are being used largely?

Shri Chandulal Premchand: Yes, Sir.

Mr. Chairman: Sanforize is only for the trade-mark.

Dr. C. B. Singh: That information they will send. It may be so.

Shri Chandulal Premchand: Lakhs of rupees are spent for advertisement to create a craze and preference by the consumer.

Dr. C. B. Singh: Just like Aspro.

Shri Chandulal Premchand: We shall send information on this.

Shri Charandas Haridass: Only the word "sanforised" is very important to our consumer.

Shri Chandulal Premchand: The hon. Member has given the analogy of Aspro. Though other companies are making the same thing and marketing under different names, Aspro is selling more than all the other combined because of their high pressure advertisement campaign.

Shri K. K. Warrior: That does not mean that there is no such thing as Anacin or Saridon. They can also spend on advertisement for their own product. Why should they not risk that?

Shri Chandulal Premchand: Advertisement and the effects of advertisement are to a large extent a gamble. For instance, Alembics have been advertising Rubex against Vicks Vaporub and during the year they have spent perhaps more than Rs. 7 lakhs, but the sale of Vicks has not been affected at all. Instead, they have recently created a factory spending Rs. 65 lakhs for manufacturing the four Vicks products.

Dr. C. B. Singh: As you seem to know about this subject so much, can you tell me whether there is any substance in the common complaint that the cost of patented drugs is very high as compared to other drugs in the market?

Shri Chandulal Premchand: This question has been discussed in detail by Mr. Justice Ayyangar in his report. I do not think we should dwell on that.

Shri A. T. Sarma: You said you wanted "frivolous" to be substituted by "scandalous", but even then you will be allowing the same discretionary power to the executive, and they will have to find out whether it is frivolous or scandalous.

Shri J. T. Trivedi: As a matter of fact, "scandalous" should not be maintained on the statute-book, and "frivolous" should also be removed because it has no clear meaning. For example, I have a patent for a screw wherein the only modification is a supporting tongue which holds the screw in its own slot. Such simple inventions might be rejected by the administrative officer if the word "frivolous" is there in the statute.

Shri Chandulal Premchand: The dictionary meaning of "frivolous" is "of no value, insignificant". Judges always go by their own experience and sentiments of life, and if the invention of the screwdriver mentioned is presented for patent, it

might be considered frivolous and rejected though it may be very useful to a mechanical shop by way of saving labour.

Mr. Chairman: Where is the word "scandalous" used? Why do you bring it here?

Shri J. T. Trivedi: It is not used. I correct myself.

Mr. Chairman: "Frivolous" is used in many Acts, including the 1949 U.K. Act which is the current law there, and we adopt it. Why should you object?

Shri J. T. Trivedi: Here, the question is about defining an invention. If the invention is considered frivolous, naturally he cannot obtain a patent for it. That is the object.

Shri A. T. Sarma: You are prepared to have both!

Shri Chandulal Premchand: We are not in favour of the word "scandalous." We do not like to read it either.

Shri Shyamnandan Mishra: ATIRA, to my mind, offers a very hopeful example of joint research which can be imitated by other industries too. You have said that there is a similar research body in Bombay. We have in other countries, as for example, in the United Kingdom, BESRA which is doing research for a joint group of companies. Could you tell us that there are possibilities of this kind, for joint research, so far as other industries are concerned, because the financial arrangement also in the case of ATIRA is very tempting; 50 per cent is contributed by the Government and 50 per cent by the industry. Have you explored the possibilities of joint research so far as other industries under your care are concerned, or, could you offer some advice in this respect?

Shri Chandulal Premchand: That has not come up yet.

Shri Shyamnandan Mishra: My second question is this. So far as sanforized method is concerned, I would like to know whether it is liked by the indigenous consumers or it is liked by the foreign consumers.

Shri Charandas Haridass: Both. In export also that is mentioned.

Shri Shyamnandan Mishra: Could you roughly indicate the proportion as to what extent they are used by indigenous consumers?

Shri Charandas Haridass: Formerly we used to export our cloth in great varieties much more than the sanforized variety. Recently, the Government of India has changed its policy and has given more incentives for sanforized varieties. So, it is in the initial stages, and hence I cannot give any opinion on it.

Shri K. K. Warrior: Formerly other varieties were being used in much greater quantities. Now, the Government policy is to encourage sanforized cloth so that royalty will be more. That is what he is saying.

Mr. Chairman: Is it because you have an export market for sanforized varieties?

Shri Chandulal Premchand: In some Asiatic countries and in some European and other countries.

Shri R. P. Sinha: Could you tell us what proportion of sanforized cloth is exported?

Shri Chandulal Premchand: We cannot give it.

Shri R. P. Sinha: Will you be able to send us the figures later?

Shri Chandulal Premchand: Yes.

Shri Shyamnandan Mishra: May I know whether ATIRA has got any

collaboration arrangements with any research body in foreign countries.

Shri Chandulal Premchand: Not in foreign countries. But there is an exchange of information with research institutions like those existing in Bombay and Calcutta. There is no foreign collaboration.

Shri Shyamnandan Mishra: They do not have any arrangement for the exchange of ideas with foreign institutions?

Shri Chandulal Premchand: There is an exchange of ideas among such institutions in Bombay, Calcutta and Ahmedabad.

Mr. Chairman: I am told by the Chief Controller of Patents that the CSIR is prepared to meet half the expenditure and also the initial expenditure for any other institute started by another industry in India for research.

Thank you, gentleman.

(The Committee then adjourned).

Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965.

Thursday, the 14th July, 1966 at 09.30 to 17.10 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Shri Peter Alvares.
3. Shri Ramchandra Vithal Bade.
4. Shri Panna Lal Barupal.
5. Shri Bibhuti Mishra.
6. Sardar Daljit Singh.
7. Shri Basanta Kumar Das
8. Shri V. B. Gandhi.
9. Shri Kashi Ram Gupta.
10. Shri Madhavrao Laxmanrao Jadhav.
11. Shri Mathew Maniyangadan.
12. Shri Bibudhendra Mishra.
13. Shrimati Sharda Mukerjee.
14. Shri Chhotubhai M. Patel.
15. Shri Naval Prabhakar.
16. Shri R. Ramanathan Chettiar.
17. Shri Sham Lal Saraf.
18. Shri A. T. Sarma.
19. Dr. C. B. Singh.
20. Shri K. K. Warior.
21. Shri Balkrishna Wasnik.

Rajya Sabha

22. Shri Arjun Arora.
23. Shri Vimalkumar M. Chordia.
24. Shri D. P. Karmarkar.
25. Shri P. K. Kumaran.
26. Shri Shyamnandan Mishra.

27. Shri Mulka Govinda Reddy.
28. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Pharmacy Council of India, New Delhi.

Spokesmen:

1. Dr. S. Rohatgi.
2. Dr. P. K. Sanyal.
3. Dr. S. B. Rao.
4. Shri Devinder K. Jain.

II. Federation of Indian Chambers of Commerce & Industry, New Delhi.

Spokesman:

1. Shri Ramanbhai B. Amin—*President.*
2. Shri L. S. Devar.
3. Shri C. H. Desai.
4. Shri N. Krishnamurthi.

III. Dr. V. B. Chipalkatti, *Director, Shri Ram Institute for Industrial Research, Delhi.*

IV. Business Council for International Undertaking, New York.

Spokesman:

Mr. Robert Meagher.

I. Pharmacy Council of India, New Delhi

Spokesmen:

1. Dr. S. Rohatgi
2. Dr. P. K. Sanyal
3. Dr. S. B. Rao
4. Shri Devinder K. Jain.

(The witnesses were called in and they took their seats)

Mr. Chairman: If you want to stress any point in your memorandum or add any new point, you may do so.

Dr. S. Rohatgi: On behalf of the Pharmacy Council of India, I think you for giving us an opportunity to appear before you.

The Pharmacy Council of India is the seniormost statutory body under the Pharmacy Act. We have under the Pharmacy Act State Pharmacy Councils in each State and the Pharmacy Council of India is composed of one member elected by each State Council and one representative from each State Government along with 6 members from the Inter University Board and 6 representatives nominated by the Central Government. Apart from that, we have a few *ex-officio* members like the Director General of Health Services, the Drug Controller of India etc. We have 43 members in all. There is a slight variation in the number for the simple reason that all the States have not yet formed State Pharmacy Councils.

We regulate the profession of pharmacy. In regulating the profession, the major stress is on education. We lay down standards for education in pharmacy. We have our inspectors to inspect all the courses in pharmacy throughout the country, and it is only on the basis of the approval given by this Council that Pharmacists can register themselves in the register of the State Pharmacy Councils and practise pharmacy.

The first point which I would like to stress relates to the definition of intermediates. As the definition stands at present, it might include a very common basic chemical like sulphuric acid and what not. So, we suggest that the term "intermediate chemicals" might be defined a little better. For instance, it can mean chemical substances directly or exclusively used in the synthesis of the compound and it would not include chemical reagents or substances of that nature. As we understand it, the reason why this particular sub-clause has been included is to prevent circumvention of certain provisions. That could be done by a clearer definition of intermediate substances.

In Clause 5 we have suggested that the following may be added at the end:

"Provided that the method or process of manufacture is a substantial improvement over known methods or processes."

This would help preventing useless processes from being patented.

In regard to Clause 73(2) we have suggested that a panel of experts or a technical advisory board may be set up. The reason is this. In the past it has been seen that many processes which have been published in scientific literature or in old text books of chemistry have been patented in this country. We have made some provisions in the Bill for enlarging the Patent office especially with regard to technical assistance to advise the Controller, but we feel that specialisation in narrow fields has been going on to such an extent that it is not possible for a small group of experts to advise in all branches of learning. It is therefore desirable that we have a panel of experts to advise the Controller whether a particular process has been mentioned elsewhere in scientific literature and is not capable of being patented.

Mr. Chairman: That is what the clause proposes to do. It may appoint some officers: "as many examiners and other officers and with such designations as it thinks fit for the purpose of discharging, under the superintendence and directions of the Controller, such functions of the Controller under this Act as it may from time to time authorise them to discharge."

Dr. S. Rohatgi: My submission is that this relates only to the appointment of technical advisers or experts in the office of the Controller. I may say that research has been progressing in certain fields at such a space that it is not possible even for quite a large number of experts in the Patent Office to know all about the progress that is taking place in that particular field. We have specialists in the country, working in various national laboratories, and various other bodies, from where we could draw a panel of experts to form an advisory body which will be able to advise the Controller on the latest developments in that particular field. I submit that a number of technical experts in the Patent Office may not be able to satisfactorily discharge this function.

Mr. Chairman: I think that is provided in the Bill.

Shri K. V. Venkatachalam: Clause 73(2) refer to the appointment of officers in the Patent Office. His suggestion is that an outside body should be consulted.

Dr. S. Rohatgi: The last point which we want to stress was that in case a particular process is to be exploited by a public sector undertaking which, as we understand, is a profit-making body, it would appear to be in the fitness of things if royalty is paid by the users of the patent. If the Government themselves were to utilise the patented process, it would be all right, but if the public sector undertaking were to utilise it, they might

either pay a royalty or, as we have suggested as an alternative, they should agree to sell the produce at a no-profit-no-loss basis. It would then be quite in order.

Dr. C. B. Singh: With your experience as a pharmacologist and as a teacher in pharmacy and now as representing the Pharmacy Council of the country, would you like to comment on the fact that there is a complaint that the cost of patented drugs in this country is very, very high?

Dr. S. Rohatgi: I would like, with your permission, to dilate on this particular point a little more than the question itself relates to. The point raised is whether the patent provisions as they stand today have led to an increase in the price of drugs. I would like to say a little more on the price of drugs as such, and mention the reasons why some drugs are more expensive in this country. There seems to be a considerable amount of conclusion about the price of drugs in this country. I would like to say very emphatically here that not all drugs manufactured or sold in this country are more expensive or are exorbitant, as compared to the prices in other countries. Certain groups of drugs by all means are very expensive. We have for example a large number of Galenical preparations or simpler preparations which are being made in a competitive manner by a large number of firms and the prices of these drugs, I dare say, are not higher than the international prices for these drugs in other countries. On the other hand, where monopoly or cartels have been set up, the price of drugs is certainly very high. This needs more elaboration because we might consider how monopolies are set up. The first question raised by the hon. Member, Dr. Chandrabhan Singh, is with regard to the patent provisions. The patents do set up a kind of monopoly and that monopoly is being abused in this country and the prices of these drugs are

certainly very much on the higher side. The second reason is the monopoly set up by the licensing policy and the implementation of the Industries (Development and Regulation) Act, where the manufacture is confined to one or two or at the most three firms, and where the prices of these drugs have been kept very high. Apart from all these considerations there is another factor, and that is, the cost of some of the basic materials which go into the manufacture of drugs which are used by the drug industry is higher here than in countries of the west.

Dr. C. B. Singh: I would like you to elaborate this point; that the cost of certain raw materials which go into the production of these pharmaceutical drugs is higher in this country as compared to other countries. This is an important point and I would like you to deal with it in a more detailed way.

Dr. S. Rohatgi: We have to import certain chemicals. As for example, for certain acids, such as sulphuric acid, we have to import sulphur because it is not indigenously produced or available in the country. So, the cost of sulphuric acid is higher here than what it is in some other countries in the west.

Mr. Chairman: By how much?

Dr. S. Rohatgi: It would be in the region of 30 to 40 per cent. This increase does reflect to a certain extent on the cost of production of the active substance in bulk. It is interesting to observe here that whereas some of the items which are used as raw materials in the production of bulk material cost higher, wherever the medium and small scale industries are engaged in processing the drug, the selling price of the finished drug in the finished dosage form is not in anyway higher or appreciably higher than in other countries of the west. This increase is more or less absorbed by the processing centres in the industry. The main thing is,

as we see it, that wherever competition has been set up, the prices of drugs find a national norm or level. It is not a matter of control but due to national competition that the prices come down.

Mr. Chairman: Admitting that the cost of raw material is higher, as in the case of sulphuric acid, does it in anyway justify the increase of cost by 800 or 900 per cent?

Dr. S. Rohatgi: Definitely not.

Mr. Chairman: I can understand a rise of 40 to 60 per cent, but does it justify an increase by 700 to 800 per cent?

Dr. Rohatgi: But that higher cost is not there in all cases. In some cases of ingredients, it is higher. In many other cases it is not higher. So, it definitely does not justify an increase of 800 per cent as mentioned by you.

Dr. C. B. Singh: A great amount of litigation has been going on in the country about five or six patented drugs like streptomycin, chlorphenicol, tolbutamide, etc. In all these cases the country has suffered very badly and the patent-holders have profited at the cost of the health of the people of the country. That is your view about this matter?

Dr. S. Rohatgi: The case about chlorphenicol is well-known. Chloromycetin was sold in this country at a fantastic price and the cost of treatment of a typhoid patient used to come to Rs. 60 or Rs. 70. But when the Italian material came in the market, the prices crashed. This is a specific example of abuse of patents.

Tolbutamide is also interesting. I understand several firms in India were interested in manufacturing this, but the provisions of compulsory licensing as they exist under the present Act made it extremely difficult for them to get a licence. So are the cases of other sulphur drugs like

sulphathiazol. The present Bill very rightly confines the patent to the process. A British firm wanted to manufacture this item also and when two big international concerns were confronted with each other and litigation was pending; I have very definite information that they came to a settlement amongst themselves to keep the market to themselves, keeping others out. That is how cartels are formed.

Dr. C. B. Singh: Suppose you intend a product and you are faced with the problem of protecting your right of that product being used by you because you have spent a lot of money on the research, etc. If in another country that product was being surreptitiously produced, what will you do about it?

Dr. S. Rohatgi: If I am a scientific worker and I discover a new drug, if that drug is going to be used by a lot of people the world over, I would be quite happy provided I get some recognition for it. That is lacking in our country. If I develop a new drug, what is most likely to happen as a result of the present licensing policy is that I will be faced with competition from some firms in advanced countries with a backing of 100 years and they will see that my venture does not prosper. The profit-making part is that of the capital investor not that of the scientific worker. Of course the scientific worker would like to have a certain amount of remuneration for what he has been able to discover, but he would not like to exploit it to the maximum advantage by charging excessive profits and preventing people from being able to use it.

Dr. C. B. Singh: There is a feeling that the prices of patented drugs have gradually gone down during the last five or six years in this country and even internationally. Do you agree?

Dr. S. Rohatgi: That cannot be said as a general rule. Prices of some patented drugs have come because of

certain imports from cheaper sources abroad.

Dr. C. B. Singh: Prices of most of the patented drugs have gone down. Does the same thing hold good about other non-patented prescription drugs?

Dr. S. Rohatgi: I think the comparison is not very fair for the simple reason that we are comparing a class of drugs where the profit margin is very high and another class of drugs where more than hundred or even two hundred firms are manufacturing them at a very low margin. Therefore, the question of drop in prices in the case of those drugs very rarely happens.

Dr. C. B. Singh: More than 90 per cent of the drugs used in prescriptions are non-patented drugs. Do you agree with this statement? If so, could you tell us whether price of these non-patented drugs has remained stationary, it has gone up or it has gone down?

Dr. S. Rohatgi: The prices of drugs which are non-patented and which are being manufactured by a large number of firms in this country are more or less stationary and, if anything, they have also gone down in many cases.

Dr. C. B. Singh: I would like the Patent Officer to get these figures if possible. Now, there is a feeling in the country that hardly any research worthwhile has been done as far as drugs and pharmaceuticals are concerned in this country. Would you like to comment on that?

Dr. S. Rohatgi: Generally a comparison is made between India, which is a developing country, and countries which are very highly developed. We have certainly not been able to produce anything very spectacular in the nature of new drugs because of the very simple reason that we have at the moment to manufacture a large number of drugs which are being

made elsewhere and consumed in our country. So the first step we have to follow is to start manufacturing all those drugs, which will be more of a development programme rather than a original research programme.

Dr. C. B. Singh: What is your suggestion in the matter of discovery of new drugs as far as this country is concerned?

Dr. P. K. Sanyal: The drugs that we use are of four kinds: allopathic, unani, ayurvedic and homoeopathic. When we talk about the drugs belonging to the allopathic system, we know that the medicines used in this country under the allopathic system should be known as "European system of medicine". Because these medicines are coming from Europe, any drug that is discovered in Europe comes to India and it is being utilised by modern physicians. I do not know whether we can add even a single drug in the pharmacopoeia at all today. As Dr. Rohatgi has said, what we are trying is to make those drugs which have been made in other parts of the world. In the field of new chemo-therapeutic drugs certainly we have not done anything. Perhaps it will take years and years before we can add anything which the medical profession will take. I do not know how much time it will take for this country to produce such a new drug.

Mr. Chairman: I do not think it is correct.

Dr. S. B. Rao: I would like to classify pharmaceutical research into two: applied research and pure research. So far as we are concerned, today we are confronted with a special problem. We have got to be self-sufficient in our drugs. There are certain basic drugs which will stand for quite some time. In this programme of development of the processes, relying more and more on indigenously available raw materials, plants and the local environments, they form a very important piece of

research which is very peculiar to this country, because we are working under our own conditions. The first and foremost thing about this kind of applied research, which this country has certainly been doing for quite some time in the past, is that we have to achieve a substantial amount of progress in this field.

Dr. C. B. Singh: You have stated that there is progress in the discovery of new drugs in this country.

Dr. S. B. Rao: No, I only submitted that we have made some progress, substantial progress, in developing processes for the existing drugs which are known to therapy today.

Dr. C. B. Singh: We are talking of discovery of new drugs.

Dr. S. B. Rao: That is the second part. Even there India has contributed at least one new drug.

Dr. C. B. Singh: That we know, *urea stibamine*.

Dr. S. B. Rao: It was discovered in much worse circumstances. Although our contributions may be small, let us not forget that invention is a matter of luck. After having done so many years of research it is a matter of luck that one comes across a new drug which is really worthwhile and useful in therapy.

Dr. C. B. Singh: Has this drug been patented?

Dr. S. B. Rao: I think not.

Shri D. P. Karmakar: It has come to the notice of the Committee that because of the working of patents some of the manufacturers have been charging extortionary prices. Would you agree that a composite advisory committee, representing Government, the pharmaceutical industry and the consumers would serve

a useful purpose by keeping down the prices?

Dr. S. Rohatgi: I think it is laudable suggestion. I have heard from Government circles that a Committee or cell is going to be set up. I have a feeling that unless people who are really concerned or connected with the industry also participate, it cannot function well.

Shri Arjun Arora: On price of drugs you have stated that they are not uniformly high; in some cases they are high and in some cases they are not. Apart from the cost of import of raw materials, is there any other reason for the prices of certain drugs being high in India?

Dr. S. Rohatgi: The position is that we can easily divide the drugs into two categories. Drugs like common tinctures and galenicals or other common drugs manufactured by a large number of firms are definitely not high priced. Their prices compare very favourably with the prices prevailing in other countries of the world. Then there are drugs in the other category which are high priced. The main reason is the setting up of monopolies whereby they could keep the prices on the high side. One of the reasons which has contributed to an appreciable extent for this increase is the existence of product patent. It has led to a lot of abuse. So, the provision to have a process patent is a desirable step.

Shri Arjun Arora: Could you suggest any steps to bring the prices down?

Dr. S. Rohatgi: We should review the policy under the Industries (Development and Regulation) Act. It should be our policy for the purpose of attaining self-sufficiency in drugs to manufacture most of the drugs in India. The development of manufacture is rather a tedious process. We start from the laboratory scale ex-

periment. If it is successful after considerable effort, we bring it to the pilot plant and then take to manufacture. All this requires considerable expenditure of time and money. If the policy is so enunciated and implemented that we are determined that most of these items will be manufactured by us in the country, as has been done by the Soviet Union, I see no reason why we should not be successful in doing it. We have the ability and resources. If we cannot do something today, we can try hard enough so that we can do it tomorrow or the day after. I have seen cases of this nature in the Soviet Union and Japan. If a particular person or firm develops a new item, they are recognised by the State as having made a definite contribution to the economy and the development of the industry in the country. It is very important that protection is given to those pioneers at least for a certain length of time so that they can come up. Then, after a few years, certainly we can introduce competition from abroad, if necessary, to see that healthy competition exists. That would be my humble suggestion.

Shri Arjun Arora: You have stated that there are cases in which the industrial licensing policy has acted as a disincentive to scientific research in India. Could you mention one case to substantiate this statement?

Dr. S. Rohatgi: It is a little awkward for me to state because I have had, the occasion of experiencing it. I would not like to give the details of the case. I would briefly outline how things move. In the development of active substances derived from medicinal plants, which happened to be my field of study. I made quite a study of what are the requirements of the country and in relation to the particular plants which are not growing whether they could be introduced here. Many a time it happens that we have a particular specie of the plant growing indigenously whereas that plant is not the best source of that active substance

and we have to introduce a new plant in the country. So, the introduction of a new plant, analysing the active substance in very minute quantities from each plant and crossbreeding, improvement of strains and thereby developing the cultivation is a very lengthy process which takes anywhere up to 7, 8 or 10 years.

Having done that, the next step is the development of the process of isolation of the active principle and many a time one is tempted in an effort to do everything in the country, to design the plant itself to set up the manufacture here. That position was attained and the firm I was advising and erected a plant to meet the entire needs of the country for that particular life-saving substance. However, within a very short time, before regular large-scale production could be set up on sound lines, two foreign firms, who so far had made no effort whatsoever to set up manufacture and were conveniently importing the active substance and processing it in India, obtained a licence for manufacturing very large quantities which were five to ten times the average import figures of the country during the last three years. The reason given later on, when I talked about this, was that they intended to export. It was really surprising for me to hear that because permission had also been given to these firms to import the medicinal plant itself which had been successfully grown here. It was difficult for me to imagine how, after importing the plant, one tonne of which yields one kilogram of the active substance, it could be processed in India and exported on a competitive basis. Over and above that, royalty was given to the parent firm. It was very difficult for me to understand that when a process had been developed in the country why should royalty be paid by the country to a foreign firm.

Nevertheless, this is merely an example; perhaps, it may not be a general policy. But I got the feeling

that the implementation of the Act needs to have a different orientation so that our scientific workers get due encouragement and do not get discouraged. At the moment it appears that it is more advantageous for any firm in India to enter into a collaboration with a foreign firm rather than do it the hard way. I certainly would recommend that we should have a certain amount of determination and be prepared to do it the hard way just as the foreign firms have done. Why should we be afraid of it and not follow the same procedure so that we shall have a very firm base and shall be able to stand all kinds of international competition and build a sound export market? It is not by purchasing limited know-how that we can develop a sound industrial base, but we need to develop all this know-how ourselves. It is a painstaking and time-consuming process. If we are thinking from the long-term point of view of development of industry in this country, it seems to me to be the only way.

Shri A. T. Sarma: I find that you are interested in other systems of medicine also. A number of Indian drugs have been incorporated in the British Pharmacopoeia. Do you think that these Indian drugs should be patented so that India would get royalty for them and benefit thereby?

Dr. S. Rohatgi: First of all let me make it clear that we in the Pharmacy Council do not distinguish between different systems of medicine. We are concerned with the pharmacy part of it. So, we are very happy to deal with the question posed by you. Our answer to this question would be that merely the introduction of a medicinal plant in the pharmacopoeia or the use of that plant does not necessarily entitle it to be patented. The difference lies between the approach in the two systems of medicine, that is, the western system and the ayurvedic system. In the ayurvedic system we are not actually isolating the active principle but we are

using either the whole drug or an extract of the drug which contains a number of constituents. All these constituents or at least most of them, are apparently contributing to a certain extent to the therapeutic activity of the drug. In the modern system, if you want to patent it in some foreign country, you must be able to bring the drug in such a form that it could be used by them. The specific example I would give is the case of Rauwolfia. Rauwolfia is being used in this country for centuries, but we could not patent Rauwolfia or an extract of it. However, when Reserpine was isolated, it was a specific case for patenting because reserpine brought in that form, after all the pharmacological and clinical trials, was a drug which was capable of being used by the modern system of medicine. So, if we bring any of our drugs by carrying out research to that level, we certainly can and should try to have it patented elsewhere.

Shri A. T. Sarma: The Bengal Pharmacy Council has produced so many Indian drugs and they are being accepted by allopathic doctors. They have been included in the British Pharmacopoeia also. They are in use and there is a market for those drugs. Why should they not be patented by the Bengal Pharmacy Council?

Dr. S. Rohatgi: Perhaps I have not been able to make myself clear. In order to have a patent for a drug in a foreign country we should be able to carry out research to suit their requirement and then offer the material to them so that it could be used there. Merely having a patent does not help us. If, for example, we are able to isolate the active principle from the medicinal plant and are able to carry out all the pharmacological and clinical work on it, we can certainly go ahead and patent it in foreign countries. An example of this nature can be given of certain

drugs which have been worked out by the Central Drug Research Institute at Lucknow. They have worked on a number of plants. Recently, I remember, *Cissampelos pareira* was being mentioned; another is Babchi. The active principle of Babchi has been isolated by the Central Drug Research Institute. They carried out a considerable amount of work on the treatment of leucoderma.

Shri R. P. Sinha: You gave a very interesting case just now in reply to my friend Shri Arora's question. You referred to one medicinal plant. What is the name of that substance?

Dr. S. Rohatgi: The plant is *Digitalis lanata*. What we have in this country is *Digitalis purpurea*. But the active substance of this plant is not used in our country. It is used in America. We have derived inspiration from U.K. and we use Digoxin the source of which is *lanata*.

Shri R. P. Sinha: Your process has not been utilised at all and the foreign firms are still importing it.

Dr. S. Rohatgi: I am still working on it and manufacturing it.

Shri R. P. Sinha: I would like to know what we can do in order to give incentive and protection in this Bill to people like you.

Dr. S. Rohatgi: To an ordinary worker, the thing of greatest interest is that the development which he works out is given a good opportunity to be used in the country.

Shri R. P. Sinha: What can we do here?

Dr. S. Rohatgi: For example, a product has been developed the hard way without any foreign help. Then, at least for a period of 5 years, it should be given an opportunity to establish itself.

Shri R. P. Sinha: Do you like some separate chapter to be incorporated in this Patents Bill to deal with such new substances which are being discovered by Indians or anybody else in India?

Dr. S. Rohatgi: I do not think that this would be the purview of the Patents Bill. This is more the domain of the Industries and Development Regulation Act.

Shri R. P. Sinha: We are not concerned with that. We are only concerned with the Patents Bill. If you want us to do something here, you can tell us.

Dr. S. Rohatgi: What we have suggested is that the Indian scientific worker takes much longer, due to various difficulties, in establishing or bringing his research to commercial production. Whereas the period of 10 years may be quite reasonable for the well-established industries in the West, it might in certain cases be a little short for the Indian research worker. We very hesitatingly mentioned in our Memorandum that it might be considered that the Indian scientific worker developing a process indigenously might be given a longer protection. On the other hand, we felt that this would amount to discrimination. We do not want to press for it.

Shri R. P. Sinha: That you leave to us. You tell us what you want us to do whether there is discrimination or not. Leave that to us. What I understand from you is this that the period of 10 years is going to help the well-established foreign companies who are financially and technically better placed than you are and that this period of 10 years is going to hit hard the people like

you. We are prepared to discriminate, if necessary, so that you get adequate protection. We are prepared to consider that.

Can you tell us what are your difficulties and what you want us to do to help you? If you have not thought over it, you may kindly send us a note on that.

Dr. S. Rohatgi: All right.

Mr. Chairman: Are you for the abrogation of patents so far as drugs and foodstuffs are concerned?

Dr. S. Rohatgi: In fact, we have not considered this. But we feel that in the present context of things, it would not be harmful to us. It will be of advantage to us to abrogate the patents on drugs and foodstuffs.

Shri Bade: There are some restrictive provisions in the Bill and afterwards they will become more harmful to our indigenous patentees also. Do you think that just like in U.S.S.R. where there is a system of authorisation certificate, that certificate is given by the Government and the Government purchases it and utilises it and exploits it, there should be that system here?

Dr. S. Rohatgi: I think that particular method might not be very much applicable here. Ours is a mixed economy as it exists today. In the Soviet Union, whatever is developed is manufactured in the projects which are owned by the Government whereas here we have projects which are run by the Government and also by the private enterprise.

Shri Bade: The Government purchases it and gives the award to the inventor and they, in return, select some other private company to utilise it.

Dr. S. Rohatgi: How will that help in India? I do not see how it will be of any assistance.

Shri Bade: Because that will give some incentive to the inventor. In the model law also, same recommendation is given.

Dr. S. Rohatgi: I am doubtful whether that will really lead to any advantage. If the patented process is really something which is commercially advantageous, it will pay without any award or any payment by the Government. If the Government purchases a process which does not turn out to be commercially feasible, the Government would have spent money for something on which they need not have spent it.

Shri Bade: There is a provision of compulsory licensing in the present Bill. In the existing Act also, there has been a provision of compulsory licensing. May I know why our industrialists and traders have not taken advantage of that provision?

Dr. S. Rohatgi: I have had one or two cases told to me by certain Indian firms who tried to get a compulsory licence for an injectible iron preparation and it took them three years of litigation but they could not get it and eventually when they did get it, they lost interest. I feel that the provisions, as they have been modified in the Bill, making it easier for the Indian party to get a compulsory licence, are beneficial and of interest to the industry in the country.

Shri Bade: When specifications are filed by the applicant, according to you, they should be examined by the Controller himself. But here is a provision in the Model Law that they should be sent to some other countries for examination.

Dr. S. Rohatgi: Let me explain that again. The position is that scientific research has become so very specialised that one scientific worker concentrates in rather a narrow field. We have experts like that in various fields in the country. It would be useful if the Controller is

advised by a panel of experts who could be drawn from various scientific men in the country. That was my suggestion. The decision has to be taken by the Controller, but he should be given correct information about the available printed information in literature, about the progress that is made, about the validity of a particular process for being patented and all this information can easily be given by the panel of experts which I have suggested.

Shri Bade: In the Model Law it is said that the examination of the substance of the patent application should be done by the national patent office or by the international patent institute because the controller of the particular country may not have sufficient material to examine the specifications.

Dr. S. Rohatgi: I would rather confine the examination to our own country. If we did not have an adequate number of exports to advise us or an adequate number of scientific men, we would certainly look to some other country for advice, but since we do have a number of experts now, I see no reason why we should not take advantage of their knowledge.

श्री चौरड़िया : आपने बतलाया कि प्रोसेस को पेटेन्ट किया जाय तो ज्यादा अच्छा होगा। परन्तु यह भी हो सकता है कि अगर कोई प्रोसेस पेटेन्ट किया गया तो कोई भी दूसरा वैज्ञानिक उस में थोड़ा सा परिवर्तन कर के अपनी तरफ से वही प्रोडक्ट बना कर पेटेन्ट करवा ले। आपका जो मेमोरेन्डम है एक ओर तो उस में यह बतलाया गया है कि उचित मुआवजा दिया जाना चाहिये जिस से कोई भी आदमी अपनी मेहनत का लाभ उठा सके, दूसरी ओर आप इस पक्ष के हैं कि प्रोसेस को पेटेन्ट किया जाये, जिस से दूसरा भी उस का लाभ उठा सके। इन दोनों स्थितियों में कैसे तालमेल बैठ सकता है।

डा० रोहतगी : इस में मैं सिर्फ इतना कहना चाहता हूँ कि लाभ की जो बात आपने उठाई है वह तो सिर्फ एक रीजनेबल प्राफिट की बात है कि कोई कितना लाभ लेना चाहता है। इस बिल में जो प्राविजन्स हैं उन के सम्बन्ध में मेरा कहना सिर्फ यह है कि पेटेन्टी वाजिब लाभ उठाना चाहता है तो इस बिल के जितने भी प्राविजन्स हैं वह उस पर लागू नहीं होते हैं। लेकिन अगर कोई गैर-वाजिब तौर पर उस से फायदा उठाना चाहता है तो उस के लिये इस में काफी इलाज है।

श्री चौरङ्गिया: आप इस बात से सहमत होंगे कि किसी भी खोज के बारे में कोई ऐसी लक्ष्मण रेखा नहीं रक्खी जा सकती कि इस में केवल इतना खर्च होगा या इस से अधिक खर्च होगा। ऐसी स्थिति में यह निर्धारित करना कहां तक उचित होगा कि इतने वर्ष की अवधि इस के लिये पर्याप्त होगी या पर्याप्त नहीं होगी। साथ ही यह भी हो सकता है कि यदि लाभ का समय दस वर्ष रक्खा जाय तो कोई आदमी विटैमिन बी 12 जैसी चीज की खोज कर के काफी कमा सकता है जब कि कोई ऐसी भी चीज हो सकती है जिस से उस को पूरा मुद्रावजा भी न मिल सके। ऐसी स्थिति में आप कितनी अवधि उचित समझते हैं कि जो कि इस में रक्खी जा सके।

डा० रोहतगी: इस से पहले भी आप ने एक सवाल किया था जिस का पूरा उत्तर मैं नहीं दे सका था। वह यह था कि अगर कोई किसी प्रोसेस में थोड़ा सा परिवर्तन कर के दूसरा प्रोसेस पेटेन्ट करा ले तो वह उस से काफी फायदा उठा सकता है। मैं कहना चाहता हूँ कि इस में सिर्फ प्रोसेस को पेटेन्ट करा लेने की बात नहीं है। अगर एक आदमी काफी रुपया खर्च कर के कोई रिसर्च करता है तो दूसरे को भी काफी पैसा खर्च कर के और रिसर्च कर के उस को बनाना पड़ेगा। अगर वह प्रोसेस में कोई तब्दीली करना चाहे तो भी

उस को इस पर काफी पैसा खर्च करना पड़ेगा। इस लिये वह नो होऊँ और पेटेन्ट दोनों ही लिहाज से बहुत कम दामों पर किसी चीज को नहीं बेच सकेगा, अगर असली पेटेन्ट वाजिब प्राफिट कमा रहा है।

श्री चौरङ्गिया: हमारे यहां पुराने कानून में काफी अवधि दी गई है पेटेन्ट की। उस के बावजूद इतना समय बीत जाने पर भी और सहायता मिलने पर भी कोई नई पेटेन्टेड प्रोडक्ट नहीं बन पाई। अपवादस्वरूप कोई खोज हो गई हो तो बात दूसरी है। हो सकता है कि इस के लिये हमारे यहां सुविधाओं की अथवा लेबोरेटरीज की कमी हो। ऐसी स्थिति में क्या आप उचित समझते हैं कि किसी भी व्यक्ति को आप नज़र कर के कंड्यून्स को एक्सप्लायट करने का मौका देने के लिये पेटेन्ट पारियड निर्धारित करें बजाय इस के कि दूसरों की नकल न कर के उस को वह इम्प्रूव करे। कुछ वर्षों के बाद हमारे देश में ऐसी स्थिति आ सकती है कि लेबोरेटरीज आदि की सुविधा हो जाय और नई नई खोजें हो सकें। ऐसी स्थिति में क्या यह उचित नहीं होगा कि यह सोचकर कि अभी तो हमारे यहां के लोग केवल दूसरों की कापी करते हैं अर्थात् कम रक्खी जायें ताकि पेटेन्ट जल्दी खत्म हो जायें और हमारे यहां के लोग दूसरों की कापी करने के बजाय स्वयं खोज करने की और अप्रसर हो सकें।

The question of the period of life of a patent has been discussed quite a lot. A period of ten years is quite substantial. We feel that even seven years would be quite substantial.

Mr. Chairman: Earlier your Council has made a recommendation of seven years. The Government of India called a meeting....

Dr. S. Rohatgi: There seems to be a bit of confusion here. I do not think that this question was ever raised by the Pharmacy Council. It might

have been by the Indian Pharmaceutical Association or some other body.

In fact, the point which has been raised by the hon. Member is that we could presently imitate the process or at least put them in practice in our country but then a stage might come when it might be interesting for us to extend the life of the patent. I see no reason why we would not be able to modify our laws because laws of our country, as I understand, are made for the benefit of this country. There seems to be no difficulty in this regard, but in the present context, it is obvious that the Bill as it stands today will be of advantage to the country and to the people of this country.

Shri R. Ramanathan Chettiar: The Pharmacy Council consists of representatives of States and State Governments. That is what you said earlier.

Dr. S. Rohatgi: It consists of representatives of State Councils and State Governments and representatives nominated by the Central Government and Inter-University Board.

Shri R. Ramanathan Chettiar: Does it give any power to have a watch over the prices of life-saving drugs in this country?

Dr. S. Rohatgi: No; these powers are not given to us under the Act.

Shri R. Ramanathan Chettiar: What are your specific powers? Will you kindly elaborate them?

Dr. S. Rohatgi: The Pharmacy Council of India has specific duties. They are: regulation of the profession of Pharmacy, laying down the standards of education and seeing that they are maintained and if I may make it clear, when I say that the Pharmacy Council draws representatives from the State Councils, the Pharmacy Council, therefore, represents about 80,000 registered pharmacists in the country.

Shri R. Ramanathan Chettiar: You exercise only control over the pharmacists.

Shri B. K. Das: You have said in your memorandum that both public and private sector undertakings should pay royalty when they use the patent rights. But here, in another chapter under Cl. 48 there is some Government use in hospitals and such other places. What is your idea about that when Government use patent rights for hospitals and dispensaries. Do you like that compensation should be paid or it can be done without compensation?

Dr. S. Rohatgi: Since the Government is using the material and distributing it free of charge, we are not recommending that any royalties be paid. What we meant was that when the public sector undertaking takes up the manufacture and as the public sector undertaking is also working on profit motive, then there should be no objection to paying royalty.

Shri B. K. Das: You say when it is manufactured for commercial use.

Dr. S. Rohatgi: Then they should pay royalty or give an undertaking that they will supply the material to the Government on no-profit-no-loss basis.

Shri B. K. Das: Your idea is that when it is for any commercial purpose the compensation should be there and for other purposes of Government use, it can be done away with.

Shrimati Sharda Mukerjee: You had much experience of the market conditions and the manufacturing conditions of the pharmaceutical products. May I ask you one question? Many of the foreign people who came here and gave evidence before us said that this new Bill that is before us for consideration, would be a deterrent to foreign manufacturers from coming into India. We know that to a certain extent the present day condition of our economy and technology

has made it possible for these people to exploit us. If we were to adopt the Bill as it is, would you say that the country would suffer considerably as no new people would come and start manufacture of products in the country and whether we would be able to carry on even if they do not come or we have to pay prohibitive prices for the imported products?

Dr. S. Rohatgi: The situation is this: we do not foresee any reason why the foreign firms would not want to settle here for establishing their industries for the simple reason that if it pays them, they will come and if it does not pay, they would not come and take their patents here. India offers a very big market for their products and they will certainly come and like to establish here. In case they do not want to come—I will go to the other extreme—I feel that if for nothing else, it would give an impetus to Indian research and Indian industry to start production of those products here.

Shrimati Sharda Mukerjee: That of course one would hope would happen. But a drug should have a certain amount of guarantee that it is not a drug which will go wrong and it will not harm people. Second thing is: we do not want to introduce a legislation—you know these people are big cartels and they can starve the country—have you made any research during the last so many years into the condition of our pharmaceutical industry and whether this sort of legislation will throttle the industry here?

People have presented both points of view to us. Some people—even from India—said that if this Bill is passed, nobody would come and there are some people who said that by passing the present Bill we would be encouraging Indian industry. So, what I want to know is: have you carried out any kind of inquiry into this? This is really an important point in this kind of legislation. You can pass

any legislation. Whether that legislation is premature or whether it is right—that is a thing which you have to decide.

Dr. S. Rohatgi: We have not really provided for abrogation of patents for drugs. What we have done is to protect our interests and I see absolutely no reason why, while protecting our interests, we are giving facilities to the foreign firms to take advantage of their patents, they should fight shy of exploiting this market. Nevertheless the point that you have raised is: whether the passing of this Bill might lead to a situation when foreign firms would not like to establish in India and the country would find itself in a very difficult position with regard to the supply of drugs. We have quite a large number of foreign firms established in India, and, if I might make bold to say, that the larger or the major part of the activities of these firms is not the basic manufacture of drugs but it is the processing of drugs. Now that being the case, processing is a thing which surely the indigenous industry can take up to any extent. We are fully equipped for the processing of any item. When we are faced with difficult position of not being able to get the active substance from any source, I personally feel that all the Indian talent put together would certainly find out a way out of the difficulty:

श्री विभूति मिश्र : कुछ लोगों ने गवाहियों में कहा है कि यह बिल बिल्कुल पास न हो। आप ने इस बिल का समर्थन किया है। क्या आप ने पता लगाया है कि वे क्यों विरोध करते हैं ?

डा० रोहतगी : आप के सामने इंडस्ट्री वाले आये हैं और आयेंगे भी और इस में कुछ उन को फायदा है इस वास्ते जाहिर है कि उदकी कौशिश यह होगी कि यह पास न हो। हम जो यहां पर आप के सामने हाजिर हुए हैं, हम किसी और हैसियत से नहीं बल्कि एक स्टैचुटरी बाडी के नुमायन्दे होने की हैसियत

से हाजिर हुए हैं। हम यह समझ कर आए हैं कि जनता का और देश का फायदा होना चाहिये न कि किसी खास इंडस्ट्री का ; उस बराजू पर सब चीज को तोल कर हम ने अपने विचार आपके सामने रखे हैं।

श्री विभूति मिश्र: हिन्दुस्तान में जितने पेटेंट हैं, उन में से नव्वे फीसदी विदेशी लोगों के हैं। मैं यह जानना चाहता हूँ कि हिन्दुस्तानी लोगों की योग्यता और क्षमता को देखते हुए कितने दिनों में हिन्दुस्तान के लोग इस व्यवसाय में स्वावलम्बी हो जायेंगे।

डा० रोहतगी: हाल में जो चीन का हमला हुआ और उस के बाद जो पाकिस्तान का हमला हुआ, उस वक्त हिन्दुस्तान के काफी वैज्ञानिक इकट्ठे हुए थे। उन का उद्देश्य इस बात पर विचार करना था कि विभिन्न क्षेत्रों में हमारी जो आवश्यकतायें हैं, जिन के लिए हम अब तक आयात पर निर्भर करते थे, उन को पूरा करने के लिए हम क्या उपाय करें।

श्री विभूति मिश्र: हिन्दुस्तान में पर कैपिटा इनकम पच्चीस, तीस, पचास, साठ या सौ रुपये से ज्यादा नहीं है। टाटा और बिड़ला के स्तर के लोग बहुत कम हैं। हिन्दुस्तान की जनता की यह स्थिति देखते हुए क्या आप में यह क्षमता है कि विदेशी पेटेंट की दवाओं की कीमत को गिराने के लिए आप अपनी दवाओं के पेटेंट निकाल सकें; यदि हाँ, तो आप कब तक यह काम कर सकते हैं ?

Dr. S. Rohatgi: The position with regard to price and what is often called as fair price or the price in keeping with the earning capacity of the people, is a very difficult question to decide. We have a large number of people in our country who can't afford even a fraction of a rupee for drugs. We can't manufacture drugs at a price which would make it available to all. That is not possible. But what we can certainly do is to make it at the

most economic price. Now if the system itself is such that the manufacture of the drugs brings the prices high, the industry would be helpless. So this is a difficult question, though one would certainly like that the prices of drugs should come within the purchasing capacity of the consumers. It is a very difficult thing.

श्री विभूति मिश्र: जो विदेशी लोग हमारे यहां के नव्वे फीसदी पेटेंटों का अधिकार रखते हैं, उन्होंने अपनी दवायें बनाने के सम्बन्ध में भारतीय लोगों को किस हद तक ज्ञान और विज्ञान दिया है और हिन्दुस्तानियों ने इस में कहां तक प्रगति की है ?

Dr. S. Rohatgi: It is a very relevant question. The question is to what extent the 90 per cent of the patents which are held by foreign firms, have helped in the expansion of scientific research and development or industrial development in our country.....

Mr. Chairman: That is a different matter altogether.

Dr. S. Rohatgi: It has not been of very much help.

Shri Bibhuti Mishra: To what extent the foreigners who have got patents have trained our young scientists here and have helped us in our scientific development? This is a very relevant question.

Mr. Chairman: Let us decide that among ourselves.

Shri Bibhuti Mishra: Let us ask that gentleman. He knows everything.

Dr. S. Rohatgi: My reply to that question would be that out of the 90 per cent of the patents that have been taken by the foreigners, only a fraction of them are being utilised here.

Shri Kashi Ram Gupta: He wants to know to what extent they have helped our scientists to work here in our industries.

Dr. S. Rohatgi: All I can say is that they might have given employment to a few scientists. That is about all. Also, in the foreign firms, which are licensed here, the largest volume of turnover is in processing the material rather than manufacturing the basic product. So, that is not helping us to any extent. That is not increasing our scientific knowledge in any way. That is something which we already know fully well.

Shri Kashi Ram Gupta: There is a strong opinion in this country that for the next 10 years, to speed up progress in the pharmaceutical field, we need foreign collaboration. What is your comment on this?

Dr. S. B. Rao: Collaboration may really be required in the manufacture of certain new drugs which are very intricate in nature; for example the antibiotic technology is a very highly specialised field. But for the manufacture of synthetic drugs, I may be permitted to say that there is sufficient Indian talent and we can attempt any kind of complicated synthesis in this country with great confidence. I may also submit that no collaboration with any country is going to make the position any better in regard to prices.

Shri Kashi Ram Gupta: Therefore, we should have collaboration only in selected fields?

Dr. S. B. Rao: Yes, Sir.

Shri Kashi Ram Gupta: Now you have said that a 10-year period is quite enough. But for some time for our own scientists we need some more time. Well, it is not only the scientist who matters, but along with him there must be some capital also. When we speak of our own scientists, we speak of our indigenous capital as well. So, can we put such a clause that scientists who are working out the patent with indigenous capital may be given some time more?

Dr. S. Rohatgi: Please permit me to explain this a little more. What

happens is that it is not merely the capital that makes the difference. When a scientific discovery is made, when a process is developed in a laboratory, a pilot plant has to be set up and manufacture started, and that requires the help of technologists, chemical engineers and so on. I can cite a case like the submerged fermentation process for antibiotics manufacture which was a revolutionary process developed by the Americans. When this research was being carried out in the laboratory, the chemical engineers were working side by side and no sooner the final results were obtained and the patent secured, the chemical engineers set up the plant and put it in operation. We in India do not have the facilities of chemical engineering to such an extent. That is the first point. The second is that if we want to erect a special plant, then we need a number of items; some are large and some, small; we might require special type of alloys, special type of stainless steel, glass lined equipment, etc., none of which is manufactured in India. It may take a year and a half to get them. Then we might need some packing materials. A simple packing material like Teflon which is used for packing in certain chemical plant, we can't get here. We have to import it. This process takes 2½ years and for a small thing, the development of that plant and utilisation of that process is held up. That was the reason why we had made the suggestion, not from the point of view of capital.

Shri Kashi Ram Gupta: Your suggestion is all right but my point is this. When you take to commercial use, you need some capital. Scientists are not expected to cover the whole of the capital. To put to commercial use, capital may be needed. The point is if a new adventure comes in with the collaboration of the scientists and the capitalists in this country that must be given a higher protection of the period. Is that your opinion?

Dr. S. Rohatgi: Capital, of course, is a secondary thing. The important thing is availability of the plant and equipment and items of manufacture that are required, which in certain cases have to be imported. Now that is why we have suggested that a consideration might be given for increasing the time-limit in certain cases like this.

Shri Kashi Ram Gupta: That means for the new entrants; those who are already in the field must be possessing the machinery all right.

Dr. S. Rohatgi: Yes, Sir, I think this Bill would refer to the new entrants only. But that is not entirely it. A firm or a scientist working in a firm or having a laboratory of his own is working in a particular field—in the drug field—if he some times develops an item which needs a specialised equipment, he is held up, even though he is working in the drug field, because a certain specialised material is required which is not available in the country and which has to be imported and the process of importing it itself takes 1½ years.

Shri Kashi Ram Gupta: That can be the problem for the present industry and the collaborators as well. There too the problem can arise.

Dr. S. Rohatgi: There the situation is slightly better, because they have already worked the process in their country. The plant can be fabricated in a short time. The whole plant is imported and set up here.

Shri Kashi Ram Gupta: On the last page you say the public sector undertakings should pay royalty or it should work on 'no profit no loss basis'. Are you aware of the fact that public undertakings are limited companies and when Government floats a limited company, naturally it is the first task to get a dividend. Therefore, the second suggestion becomes invalid.

Dr. S. Rohatgi: Actually I do not know whether there is any special clause of that nature in the public sector undertaking's Articles of Association, but I feel it is open to any commercial concern to manufacture and sell any product, at 'no profit no loss' basis. There is no restriction on them that they must sell only on profit.

Shri Kashi Ram Gupta: The question is that the Government policy is that a public sector company must also be competitive with the private sector companies.

Mr. Chairman: It is a matter for us to decide.

Shri Kashi Ram Gupta: Sir, we cannot deviate from it in certain cases and, therefore, I have put this question to him. He has put a thing and I want to explain the practical difficulties of it.

Mr. Chairman: It is a matter of law.

Dr. S. Rohatgi: Then it is quite clear that the first suggestion that has been made can be applied.

Controller General Patents: In the matter of chemical intermediates, you have said that it covers simple chemical substances, acids, alkalis, alcohols etc. I am afraid, this is not the correct intention of the Bill, nor is it the connotation which the word intermediates or chemical intermediates means to any pharmaceutical or other investigator. So you still feel there is any difficulty in the use of the word intermediates as provided in the Bill?—Supposing it is clarified....

Mr. Chairman: Make it clear.

Controller General Patents: Sir, it never means that. Further, to the extent to which they may be used, they are used as intermediates for the preparation. Obviously it is not our

intention to include, for instance, as apprehended, Sulphuric acid or other basic chemicals, used at some stage or other for the production of medicinal substance. It is quite obvious. I should like to know whether you still feel....

Dr. S. Rohatgi: I would like to state that I entirely agree with the Hon'ble member when he stated that the common connotation of chemical intermediates does not include sulphuric acid, but what we were worrying about was the legal interpretation as it stands here. And we felt that any item that might be used in the synthesis of a compound could be brought within the purview of this particular clause. So we thought that it might be desirable to obviate any difficulties that might come in the future by making the definition slightly clearer.

Controller General Patents: You have suggested that in view of the gradually increasing degree of specialisation, it is next to impossible for any Government or any kind of office having any kind of staff on its rolls to give the necessary attention and have any knowledgable attention to be brought to bear upon any specification as to the novelty or otherwise of it. You have suggested consultation with some experts, of whom we have quite a number in the country. But are you aware that the statute provides that as and when such applications are received or presented, in the Patent Office, they have to be kept secret. That is the first statutory requirement and they have to be kept secret till they are accepted or acceptance is made known through advertisement in the Gazette. Now, therefore, there is a certain amount of difficulty in the Controller referring these secret materials which are to be kept confidential to an expert in any University or any national laboratory. That is one aspect. Secondly, it often happens in this field

of industry, most of the inventors in the private sector might be following up closely on the same lines as those in the other sectors. I mean it is a competitive affairs, he who reaches the target earlier wins the race. Like that in a competitive situation, we may be having an expert in one of the national laboratories or Government undertakings, but an individual by his own effort may have made an invention. That invention has to be directly referred to a private expert, who, in order to be deemed to be an expert, must have been doing some research in the concerned field. That is a little difficulty in that. This has to be, of course, examined. Are there any countries in the world where at this stage at which we are now considering patent applications the specifications are permitted to be referred to any other person outside the Government employ or Patent Office? The Statutes generally do not provide that. I wish to make it clear that there is an exception. Lately, on account of the very heavy backlogs in the matter of patent applications which are being filed and which no Patent Office has been able to deal with sufficiently quickly, they have had to resort to a measure of allied nature. In the Scandanavian countries,.... In the Scandanavian countries—particularly I remember in Sweden—they refer patent applications for the purpose of examination of the technical content only to any expert who may be available or who may be willing. There is no list of their names. It is left for the Commissioner of Patents to refer them to anybody or rather it is the other way. Strict confidence is, of course, required. Is that the kind of thing you would like to have?

Dr. S. Rohatgi: Even in our field of research in which either of us is engaged we find that it takes quite a few hours daily to go through the scientific literature that is published

in different parts of the world. I cannot imagine that an expert in the Patent Office could keep track of the volumes and volumes of scientific literature that is coming from different parts of the world. Now the point which you have raised is very valid that in case it conflicts with the secrecy which has to be given to the patent application, to that extent it is correct. On the other hand, if any other outside expert has to be consulted it could be possible to obtain a vow of secrecy from him or some such arrangement could be made. If, however, this is not possible there would be another way and that would be that after the publication of the patent and before the acceptance there is a time-lag, and during that time-lag he could be consulted.

Dr. A. Joga Rao: That is not correct. So then it becomes anybody's problem. Nobody can claim infailibility in the matter of theory.

(The witnesses then withdrew).

II. Federation of Indian Chamber of Commerce and Industry, New Delhi.

Spokesmen:

- (1) Shri Ramanbhai B. Amin—
President
- (2) Shri L. S. Davar.
- (3) Shri C. H. Desai.
- (4) Shri N. Krishnamurthy.

(The witnesses were called in and they took their seats)

Mr. Chairman: The evidence that you give is public. It will be printed and distributed to our members and will also be laid on the Table of the Houses of Parliament. Even if you want any particular portion to be treated as confidential, it will be printed and distributed to our members and will also be laid on the Table of the Houses of Parliament. We have received your memorandum. If you want to stress any particular point or make a new point, you may kindly do so. Afterwards, our members will put questions.

Shri Ramanbhai B. Amin: At the outset, we thank you for giving us this opportunity of saying a few words before this committee.

The first point that we want to make is about the confirmation of patents. If we have some sort of confirmation of patents in the present Bill, it will help considerably.

The second point that I wanted to make was about the time for granting patents. In the present Bill there is no provision for this. After the complete specifications are filed, the examination might take an unlimited period and thereafter also by the time a patent, is sealed it may be many months, as there is no time-limit. We feel that there should be a time limit so that one is assured of his patent in a certain period. We suggest that from the filing of complete specifications to the sealing of the patent, the time should be thirty months.

The time limit for the Examiner should be one year. Within a year he should examine the patent and then we should have the final patent in a certain specified period.

Further there should be provision for an Appeal to the High Court, in the relevant provisions of the whole Bill. In certain Sections it is provided but in quite a number of others it is not provided. We think it should be appealable to the courts to get proper justice.

Mr. Chairman: The experience is that the courts take a long time. Some cases have been pending already for a very long time. Would you be satisfied with an Appeal Tribunal as it is in England?

Shri Ramanbhai B. Amin: Yes, Sir. If we have a Tribunal the period for the decision should also be specified.

Mr. Chairman: We cannot specify the period as it is not allowed constitutionally.

Shri Ramanbhai B. Amin: Some guidelines should be there.

Mr. Chairman: Yes that is possible.

Shri Ramanbhai B. Amin: How the Tribunal is going to operate? Will that Tribunal be moving about in the country?

Mr. Chairman: We may provide that it may periodically visit important industrial centres. It will be Special Court for patents. Will that be acceptable to you. We have got the single judge tribunal in England.

Shri Ramanbhai B. Amin: In that Tribunal there should not be any people from the Patent Office.

Mr. Chairman: They will not be there.

Shri Ramanbhai B. Amin: Then in Clause 48 we were suggesting that when the Government wants to import some of the patented products from outside they must first give the chance to the local industry.

Mr. Chairman: You want the Government to give a notice first to the patentee.

Shri Ramanbhai B. Amin: We must look to the circumstances which may be prevailing at that time because it may be that for some of the intermediates that go into the production of this particular item the cost may be higher within the country and there may be a lot of idle capacity in the country—I am talking from the angle of foreign exchange difficulty which we are likely to suffer. So some such sort of provision will be helpful if it is provided in clause 48.

Ministry Official: Even normally Government will not allow imports if something can be done within the country.

Shri P. K. Kumaran: Suppose a medicine is not available within the country or they charge high prices. Should the Government not import?

Shri Ramanbhai B. Amin: That is why I say Government should give a notice as regards the price and capacity.

In our present Bill we have provided that information about novelty outside the country should be provided. Novelty outside the country is extremely difficult for a patentee to prove. It is very cumbersome and takes a lot of time. If we limit ourselves to what is available within the country, whatever knowledge is available in the country, and on that basis the patents are granted it will facilitate us a lot and things will move fast.

The terms of the patents we have given should be from the date of sealing—I think that is what the Act provides—and there is differentiation between drug and other patents. I think there is hardly any justification to have that differentiation. If possible, it should be the same.

Mr. Chairman: Do you know except America every other country has made this differentiation?

Shri Ramanbhai B. Amin: If it is necessary there should be some provision for extension if there is hardship. Further for patents which are already granted their terms should not be disturbed.

Mr. Chairman: You do not want to have a retrospective effect.

Shri Ramanbhai B. Amin: Yes, Sir.

In our 'Licence of Right' provision we have mixed up the drugs and food patents along with the chemicals and the optical glass and other patents. I accept that licence of right is necessary for drugs and food products, but why mix up the others with these? It would also be better if we can provide in the Bill a specific period within which Clause 88 can be made applicable, so that within a year's period or so the final judgment should come, so that it is not unnecessarily prolonged or lengthened.

In the case of compulsory licence, a period of three years is given for monopoly use to the patentee. Similarly, there is justification in the case of drug and food patents also to give the patentee a three year period after which only a licence of right should be given to others, rather than having it from the date of sealing.

Mr. Chairman: Then there is no difference between the two.

Shri Ramanbhai B. Amin: The procedure for compulsory licence is laid down in the Bill itself, and it might take even five years, while the licence of right is automatic.

Shri L. S. Davar: If a product claim is allowed, which is limited to the process, in the case of an infringement, the onus of proving that the product has not been manufactured by the patented process should shift from the plaintiff to the defendant as is the case in Germany and Holland.

Dr. C. B. Singh: What have you to say on Clause 48 where Government want to use a patent for their own use?

Shri Ramanbhai B. Amin: If a plant is to be put up by Government, which includes public sector undertakings, C.S.I.R. etc., why should they use the knowhow developed by a patentee without paying any royalty?

Dr. C. B. Singh: About royalty what have you to say?

Shri Ramanbhai B. Amin: You have put a limit of 4 per cent. It would be better if we have no limit, because 4 per cent is very little in this sense that out of that tax will go and hardly 2 per cent will be available to the person who takes out the patent. The normal custom is to go up to 10 per cent. If you are going to have a royalty, it has to be a little higher. Again, if you put a higher figure, everybody will try for the higher figure. So, it should be left to negotiations between the parties.

Dr. C. B. Singh: The complaint has been made that hardly any research has been made in this country. Do you agree to this general proposition that research has lagged behind in this country?

Shri Ramanbhai B. Amin: No, because if you study some of our pharmaceutical industries on the western side, you will find that there has been quite a lot of research done.

Dr. C. B. Singh: You restrict your remarks to pharmaceuticals. The Gujaratis persons from Ahmedabad themselves have said that hardly anything has been done. They have told us so here.

Shri Ramanbhai B. Amin: I can tell you from my first-hand experience, because I am heading a pharmaceutical company and we are continuously doing research. We are also expanding continuously our research facilities.

Dr. C. B. Singh: How much money you are spending in the firm?

Shri Ramanbhai B. Amin: I cannot tell you off-hand.

Dr. C. B. Singh: You may give us a rough figure.

Shri Ramanbhai B. Amin: I can send you the information. But I think the proportion is between two and two and a half per cent on our sales value. It may be about Rs. 14 lakhs to Rs. 15 lakhs per annum.

Dr. C. B. Singh: You have not been able to produce any patented drugs.

Shri Ramanbhai B. Amin: We have taken out several patents, and we are developing our patents; we are holding about 13 to 14 patents in Alembic, Boaroda.

Dr. C. B. Singh: To increase the quantum of research you said you are spending two to three per cent.

Shri Ramanbhai B. Amin: We would like to go up to five per cent if the

profit margin permits us and if we get talented people to head the various research departments that we are developing.

Dr. C. B. Singh: The complaint has been made that the drug industry is making huge profits.

Shri Ramanbhai B. Amin: That is not quite correct, considering the whole spectrum of the industry.

Dr. C. B. Singh: I would be very happy if you can prove that it is wrong.

Shri Ramanbhai B. Amin: The drug industry in the last year has been squeezed quite a lot in the sense that the prices have been pegged in 1962 and since then the cost of almost every thing has gone up, right from labour, raw materials, packing materials, etc., and still the drug prices are the same. As a matter of fact, what is happening now is in some of the drug items, the manufacturers have to stop manufacturing because they cannot continue to lose. I think that the general feeling that there is huge profit being made is not right. It may be so in a very few items.

Dr. C. B. Singh: I agree with you that there are two or three firms like that. Is that the general condition in other pharmaceutical firms, excluding Alembic and CIBA?

Shri Ramanbhai B. Amin: Other firms have started developing their research departments and they are expanding. Sarabhai Chemicals is doing so. Many other firms have started research departments and are expanding them. It is a gradual process.

Dr. C. B. Singh: Our feeling is that this is proceeding very slowly. We know they have started such departments. We have seen most of them, but the progress is very slow. Can you suggest anything by which you can increase the tempo, because new drugs can be found only by greater amount of money being invested and spent, so

that better research is done and more and more new drugs are found?

Shri Ramanbhai B. Amin: One of the things is to give protection when you find out a novelty.

Dr. C. B. Singh: That is quite right. Any other suggestion?

Shri Ramanbhai B. Amin: I think it is rather difficult to show any specific way to go about it excepting that we have to create a climate not only in the drug industry but in all industries because the present conditions do demand such a thing.

Dr. C. B. Singh: How will you want us to create a climate? You are in this profession and we would like you to tell us something about it.

Shri Ramanbhai B. Amin: There may be some special tax relief; as Shri Manubhai Shah said at one of the meetings of the Board of Trade, for those who are willing to develop research some grant-in-aid may be given.

Dr. C. B. Singh: There is already an income-tax rebate on research.

Shri Ramanbhai B. Amin: I know. If these measures are not enough, we have to go about it in newer ways. Grant-in-aid may help those who are doing research already, rather than those who are not doing research now. Some method can be worked out. I think we should create a general climate that only through research we will be able to reduce our cost of production, and on the part of the Federation, we are trying to discuss it continuously in our committees and come out with circulars advising our people in that direction.

Dr. C. B. Singh: You represent a very important body. Something coming from you has got a great meaning. You have mentioned tax rebate. You want to create a climate, which is a vague term. The climate today may be good and tomorrow it may become worse. I should like you to say something more.

Mr. Chairman: Could you discipline your members to spend a certain percentage of their profit on research?

Shri Ramanbhai B. Amin: The Federation is a voluntary body. There is no question of discipline like that. But we can, by discussion amongst ourselves, point out the benefits which will accrue out of the new research which will go to reduce the cost and improve the products and prevent the drain on the economy. That is being done.

Mr. Chairman: Have you taken any steps in that direction?

Shri Ramanbhai B. Amin: We would very much like to have the suggestions from you. We are trying to do on our own; and we are not only quite alive to the problem but are also trying to do it in our own way.

Shri Bade: I am shocked to hear the witness saying that the action should not be retrospective. That is against the spirit of the Bill itself. Does the witness want that the foreign pharmaceutical firms should continue to exploit India as they have been doing all through these years?

Shri Ramanbhai B. Amin: I am quite clear in my mind because I am heading a pharmaceutical company myself. I know all the difficulties that we are having because of foreign patents, but at the same time I would like to respect the capital or the cumulative knowledge which they have acquired by spending money, and that is why I am pressing for it.

Again, as I told you, we would like to have licence of right, so that we can definitely exploit them. We would not like them to continue to exploit us in the sense of not allowing us the entire field. But if they develop the knowledge, we should respect it and pay for it. The licence of right provision will definitely make us use the new inventions that they have developed by paying reasonable amounts of royalty. It is not that we will be debarred from using them.

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Shri Bade: When you say that the Bill should not be retrospective that means that we should keep the period of patents as it is running for the last few years.

Shri Ramanbhai B. Amin: Retrospective effect is something not desirable. If having granted something, we would have the right to withdraw, from the equitable point of view, is it a desirable thing?

Shri Bade: Is it equitable that they should go on exploiting us more at the cost of the poor people?

Shri Ramanbhai B. Amin: That is not the intention. The licence of right provision will take care of that. They cannot continue to exploit us.

Shri Bade: In what way do you want it to be retrospective?

Shri Ramanbhai B. Amin: It is only about the time-limit, not about other things. Once having granted 16 years, we do not want it to be brought down to 14 years.

Shri Bade: Regarding clause 48, you say that we should first give a chance to the producers in the country first and only if they refuse, Government should import it?

Shri Ramanbhai B. Amin: If there is manufacturing capacity within the country, that should be fully exploited before we fritter away our foreign exchange in importing them.

Shri Bade: Clause 48(d) refers to "a machine or innovation".

Shri Ramanbhai B. Amin: If that machine is manufactured within the country, Government should try to procure it locally before they import it.

Shri Bade: Instead of the Government taking the whole thing and abrogating the patent, if the

Government gives some reward, have you any objection?

Shri Ramanbhai B. Amin: If the Government is willing to give some compensation, that is all right. But local capacity should be first fully utilised.

Shri Bade: Till now all the witnesses have come only to plead for the pharmaceutical industry. What is the effect of this Bill on other industries?

Mr. Chairman: We have published the notice in all the newspapers. They have not bothered to come. Why do you worry?

Shri B. K. Das: In clause 87 (a)(iii), you want chemical substances including alloys, optical glass, etc. to be taken out of the purview of that particular clause and put under the clause providing for three years' time? You have no objection to food remaining there, but chemical substances should go out of the purview of that clause?

Shri Ramanbhai B. Amin: In the case of food and drugs, licence of right is going to be automatic. We want it should continue to be automatic, but there should be a grace period of three years. As in the case of other inventions, for alloys, etc. also you can ask for a compulsory licence under clause 86 by going through all those formalities. There is no need to mix up food and medicines and chemical substances like alloys. In the case of medicine and food, we understand on humanitarian grounds, exploitation should be reduced as much as possible. But in case of other things, there should be a distinction.

Shri B. K. Das: At least chemical substances should be put under the other section?

Shri Ramanbhai B. Amin: Yes.

Shri Kashi Ram Gupta: In the case of drugs, the Bill provides a period of ten years for a patent from the date

of completion of specifications. Do you agree with it or you want the period to be calculated from the date of sealing of the patent?

Shri Ramanbhai B. Amin: If it is from the date of sealing for all other industries, it should be the same for the pharmaceutical industry also.

Mr. Chairman: He wants the same provision for both.

Shri Kashi Ram Gupta: During the last few years, the country has been speedily having foreign collaborations in the pharmaceutical industry. In your opinion should this continue at the same speed or it should be allowed only where our people cannot do the job?

Shri Ramanbhai B. Amin: There are different viewpoints on this in the Federation itself. By and large, the feeling is we should try to develop our own know-how as speedily as possible. This idea should be uppermost when we have collaboration agreements. But in sophisticated industries where new things are coming up much faster, till we catch up with them, we should have collaboration agreements.

Shri Kashi Ram Gupta: That is, in the pharmaceutical field, you want the collaboration to continue at the same speed as till now?

Shri Ramanbhai B. Amin: The speed has already started tapering off, because we have started making many many new things ourselves. In the formulation technique, i.e. buying basic things and formulating them into a tablet or a capsule, our know-how is fairly well developed and we may not need much collaboration in that field. In making basic things like vitamin B, vitamin C and the like, our research is still backward. We are trying to fill the gap. Till the gap is filled, it may be that we will have to have collaboration or at least exploitation of their patents and know-how.

Shri Kashi Ram Gupta: So far as basic research is concerned, the present position is that either the Government institutes do it or institutes like CIBA do it. Our own pharmaceutical industries are not in a position to take up in right earnest this work. Do you have any suggestions about it? Do you think the present system has to continue for some years to come?

Shri Ramanbhai B. Amin: We all have to make our best efforts to develop our own know-how. About the institutions I have no suggestion to make. I can only say that we are doing our utmost to bring about that awareness and we try to assist in developing our own research.

Shri Kashi Ram Gupta: It is stated that to have initial research equipment a lot of money is required for basic research. If our pharmaceutical industries are not in a position to invest that much then only we can have help from the government institutes. Can you suggest something else?

Shri Ramanbhai B. Amin: Except giving some tax relief and grants-in-aid as far as the financing of it is concerned, the rest of it is a real endeavour on the part of the manufacturer, because it needs a combination of medical people, synthetic scientists, pharmacologists and so on. It needs a lot of spade work.

Shri Kashi Ram Gupta: There need be some sort of subsidisation?

Shri Ramanbhai B. Amin: If we can do that, it will improve matters.

Shri R. Ramanthan Chettiar: You have stated that the royalty should be 4 per cent of the ex-factory sale price in bulk. Will you kindly elucidate that?

Mr. Chairman: He has said that it has to be left to the parties concerned.

Shri Bade: In Japan, one of the witnesses said, foreign collaborators,

foreign industrialists or foreign pharmaceutical manufacturers will not be allowed to import the products but they have to manufacture the products in Japan itself. In the same way, if we make a provision here that the foreign companies will not be allowed to import and they must start their factories here, will it not benefit our country?

Shri Ramanbhai B. Amin: To the extent we can make it here it will certainly help our country. But I do not know how it can be done. It has to be a willing participation, where more and more people are tempted to make the products here rather than import them. The provision regarding licensing of right will definitely go a long way to help them make it here.

Shri K. V. Venkatachalam: Shri Amin, you represent the premier industrial organisation in this country. I would like to know your Federation's views on this point. It has been represented to us that the net effect of this Bill will be to retard the development of industry in this country. I want your answer from two points of view: whether this assessment is correct from the point of view of our own internal growth or internal resources and, secondly, from the point of view of foreign know-how coming into this country?

Shri Ramanbhai B. Amin: It is a very difficult question, but personally I think that the suggestions we have given to you, if incorporated in the Bill, will improve matters and then this Bill in no way will be causing any hardship. The suggestions we have given should be considered and incorporated, and then it will go a long way to help in the development and growth of the country and it will not have any retarding effect.

Mr. Chairman: It has been represented that if this Bill is passed it will scare away foreign investment. What is your view?

Shri Ramanbhai B. Amin: If this Bill is passed with the amendments that we have suggested, I do not think foreign capital is going to be scared away.

Mr. Chairman: Thank you very much, Shri Amin, for coming here along with your colleagues and helping this Committee in considering this Bill.

(The witnesses then withdrew)

III. Shri V. B. Chipalkatti, Director, Shri Ram Institute for Industrial Research, Delhi.

(The witness was called in and he took his seat)

Mr. Chairman: The evidence that you give, Mr. Chipalkatti, is liable to be printed and published. It will be distributed to all our members and laid on the Table of the House. Even if you want any portion of it to be treated as confidential, it will be printed and distributed to our members and Members of Parliament.

We have received your memorandum. It has been circulated to all members. If you want to elaborate any point or make out any new points you may kindly do so. Afterwards members of the Committee will put their questions.

Shri V. B. Chipalkatti: In my memorandum, Sir, I have touched on the question of product versus process patent, the question of time limit, compulsory licensing, licence of right and I have made some general comments also. On the specific questions regarding product versus process patent and other items I will reply in the end if any questions are put to me. But there are some general comments which I consider very important.

On page 4 of my memorandum I have stated:

"The total experience available in India on all aspects of patents

could be considered inadequate so that the approach to the Patent System at the moment appears more politically biased than technically biased. It is suggested that Sub-Committees of representatives of Patent Attorneys, Patent Examiners and Experts and Specialists with adequate experience in patenting and in the utilisation of patents, are formed with a view to make a report on the existing status of technical knowledge as applied to the present system. If this is not done, there is a great danger that the present confusion in Patents would get further confounded."

What I mean to say here is that it is not the existence of a law that ensures correct national interest being safeguarded. If technically the country as well as those who take patents and those who utilize patents do not have necessary experience and skill, many times foreign patentees who have this experience and skill can manage to take patents and work them in such a manner that it is virtually impossible for local people to take advantage of the law.

I might refer here to the existence of a compulsory licensing clause in the present Bill. I believe that even this system of compulsory licence is not properly utilized. So I say:

"Far greater stress to make the compulsory licensing system more effective is called for. Unless greater experience is gained in this field, no far-reaching changes in the present Patent Law seem to be called for.

Since 95 per cent of the patentees are foreigners, and since a majority of these patents are not utilised in India, it is obvious that the Indian Patent System merely acts more or less as a clearing House of a new patent literature. It would be far more useful to make an expert review of the utilisation aspects of the patents and

concentrate on remedial measures."

rather than concentrate on the legal aspects, at this stage of development.

The system of patent examination in India should be made more competent for this purpose. There should be efficient and competent staff in the Office of the Controller of Patents to ensure that third-rate patents, having no genuine inventive merit, are not granted.

Shri Bade: You have stated that this is more a political than a technical measure. According to jurisprudence, all contingencies cannot be covered by a law. The law tries to plug all loopholes. From 1911 onwards the foreigners had the advantage of squeezing and mulcting the poor people of India in the matter of drugs by creating a monopoly. Do you not think that the foreign industrialists and pharmaceutical firms will be annoyed and disturbed that such a Bill is being passed?

Shri V. B. Chipalkatti: I think it is quite in order that they should be annoyed. But I do not know how we help ourselves by merely annoying them.

Shri Bade: Suppose we make all patents regarding drugs and food automatic licences, will it not be beneficial to us?

Shri V. B. Chipalkatti: May I cite an example here, trying to make clear the point I made? For the last ten years we have taken about 120 to 130 patents in our research organisation and about two years ago I was myself conducting some research work on making wash-and-wear fabrics. I thought it was a genuinely new invention for which I should try to get patent protection. But by the time I had made an application and have prepared a specification for an application, I found that a firm in U.K.

had already put up an application in the Patent Office, covering the subject matter of what I was trying to do. Then I thought, let me make use of the compulsory licensing system so that if our industries are interested, they could use my work, which would not need any foreign collaboration or foreign technical know-how. But, to my great surprise, I found that our industry itself, even if the patent was thrown open to the whole country, was not in a position to utilize the patented know-how for the benefit of the nation. Therefore, such things are involved, when we talk of whether a law is right or a law is wrong. I wish to make it plain that I do not consider myself to be an expert in deciding what should be the legislative aspect of the patent law. I do not think people like me should interfere in these matters but when we are given a chance to say something, all I wish to point out with great stress is the need for having expertise and knowledge about what is involved in a certain patent and utilisation of a patent is not as easy as it looks on paper. That is the point I would like to make.

Shri Bade: You have suggested in your memorandum that patents for drugs and medicines should be abrogated.

Shri V. B. Chipalkatti: No, Sir. I have stated here that if the law decides that product patents in medicine may not be granted, there will be some harm caused to the flow of knowledge into the country. If the foreign firms know that their patents will not be granted, they will not make an application. If they do not make an application, that knowledge remains out of bounds for Indian workers. To that extent, I would urge that all patent literature should be taken as a disclosure for the benefit of the nation and after a patent is given, if the compulsory licensing system is properly invoked, I see no reason why India cannot prevent some of the harm that is being done.

Shri Bade: On page 2 of your memorandum it is stated:

“ . . . instead of excluding all pharmaceutical and food products from patentability, the Government may insist on compulsory licences in all nationally important cases.”

It implies that you are not in favour of compulsory licences for all drugs and medicines but only in those cases where Government thinks proper.

Shri V. B. Chipalkatti: Yes, I hold that view because I feel that in another ten years' time the Indian researcher will come into the field when this law will work against his interest, and I certainly do not want that there should be any patent law which will not give any incentive to the individual researcher who is working for the benefit of the nation. The same thing will hold true of Indian firms who are employing researchers in their organisations. So, if it is made a general law irrespective of national interest, then all the incentive to the research workers will be taken away.

Shri Bade: In the USSR the original inventor is given a certificate called the authority certificate. The Government takes his invention and sells it to other companies. Are you in favour of such a system?

Shri V. B. Chipalkatti: I am afraid I do not have a definite view on that. If the Government is more efficient than the individual, I think this system is alright. But if the individual happens to be more efficient than the Government, this system will be detrimental.

Shri Bade: The Government is made of individuals. It is not separate from individuals. Anyhow, on page 3 of your memorandum you have stated:

“In spite of the fact that this system of compulsory licensing has been in existence for quite a

long time, it seems that the advantages of the clause have not been properly utilised for the good of the nation.”

Who have not utilized it?

Shri V. B. Chipalkatti: The Indian entrepreneurs, scientists and technologists, who are involved in making this compulsory licence system a success, do not even approach the Government asking for a compulsory licence because the total condition of our industry and the total level of technical knowledge and skill that ought to be there to appreciate the contents of a patent is absent here.

Shri Bade: According to you, this Bill should be more stringent and we should have more restrictions on the foreigners. They must start the industry here and not import medicines etc., from outside.

Shri V. B. Chipalkatti: Yes I think, it would be very very nice if the Government of India or the patent law could do something to see that the foreigner starts manufacturing the product in India. But this may be a question of economics—of consumption and of investment.

Mr. Chairman: Of foreign policy also.

Shri B. K. Das: Just now you were pointing out that we should take care that our Patent law does not go against our own industry and scientists. Which particular provision did you have in your mind?

Shri V. B. Chipalkatti: Suppose, we have a patent law in which every patent that is issued has a licence of right stamp on it from the very beginning. Naturally, what will happen is that the confidence of the young and, perhaps in many cases, inexperienced inventor will be shaken by the past history. If the past history points out that even after you do a lot of good work you do not get any incentive or return from that, the

young man will not be interested in putting his best effort. So, I hold that the patent law is genuinely for the interest of the society as a whole because the knowledge that comes out in written form in the patent is a very vital piece of literature. Anything which helps the publication of such knowledge in a very free manner, whether the patent is utilised or not, in my opinion is very healthy.

Shri B. K. Das: I am quite puzzled by your comment on clause 45 (page 3). You say there that since 95 per cent or more of the patents belong to foreign patentees, this clause is considered healthy.

Shri V. B. Chipalkatti: I believe, I did not follow it very well when I wrote this. Since then I have been thinking about it and today I wish to take the opportunity of adding one or two sentences which are needed to be added to this. I am very sorry for this. I may explain what I wish to say here. At the moment a large number of patents are held by foreigners. Therefore, if we introduce this clause of licence of right, it would mean that the Indian researcher is not affected. In fact, supposing, the same thing was going to be done after ten years when I expect more and more genuine Indian patents would come into the field, the Indian researcher is going to be affected from the point of view of incentives. So, though the clause appears to be healthy at the present moment, in the long run it may not be. This is what I wanted to say here.

Shri B. K. Das: You have gone through the Bill as it is before us. You have seen that we have placed food and medicines on a separate basis so that there may be improvement and research in them and cheap medicines may be available to the people. Do you not think that it ought to be done?

Shri V. B. Chipalkatti: Quite frankly, passing of a law will not do this. Using the existing patent law more

efficiently in my opinion will be far more important than making any changes in the law. So, with the compulsory licence system, if the existing Act is made more efficient and effective, it will be quite all right.

Mr. Chairman: Except for the USA, all other countries have made this distinction in respect of articles of food, drugs and medicines.

Shri V. B. Chipalkatti: There may be some differences in the manner in which they have done it.

Mr. Chairman: They have prescribed a lesser period. Some countries have even adopted that there should be no patents of drugs and medicines.

Shri V. B. Chipalkatti: I am sorry, I do not know that.

Shri Kashi Ram Gupta: It is made out that basic research requires a huge amount of money to be spent.

Shri V. B. Chipalkatti: It depends on what basic research we are thinking of. The money is required not for making an invention but for testing it. Unless a new drug is tested very scientifically and very properly its utilisation is almost impossible. Some of these foreign firms which do the testing not only in their own countries but also in other countries are, in my opinion, doing a very useful service—to India also—when they spend a lot of money in testing their new drug. I do not think at the present stage we are well organised for doing this large-scale testing which is very costly.

Shri Kashi Ram Gupta: So, research is not expensive but testing is expensive.

Shri V. B. Chipalkatti: Yes.

Shri Kashi Ram Gupta: Can you make out the difference in the allocation between the two?

Shri V. B. Chipalkatti: I am not an expert on pharmaceuticals but in

my own field of textile chemistry and chemicals, we have made some calculations of the money spent right from the day you start research to the day the research becomes commercially utilisable and my estimate is that for every rupee that we spent on research, Rs. 10 to Rs. 30 are required for making that research commercially feasible. The research organisation's job normally stops after spending the first rupee and probably adding eight annas or another rupee to transfer conviction and confidence to the people who are going to utilise it. The researcher himself is incompetent and incapable of utilising his own work. There are instances in history where a particular research has been used after the man is dead and gone after 100 years. So, the utilisation aspect of any research work is a far more complicated thing than the invention aspect.

Shri Kashi Ram Gupta: That Rs. 10 to Rs. 30 include cost of machinery and everything.

Shri V. B. Chipalkatti: No; this does not include any cost of the plant or land or the investment required for running a factory. This includes only the intermediate stages. For example, you have to test the efficacy of the process or the cost estimates as they come from the laboratory process. Then, when you scale up a process, you find that some of the very basic, fundamental mathematical formulae on which these processes are based need to be changed to suit the new environment. Then, you must test whether the production is commercially acceptable to the consumer. You must also test whether the instrumentation and the flow of goods is reliable qualitatively and quantitatively. All this involves about three or four steps which we generally describe as laboratory development, pilot plant development and semi-commercial development etc.

Shri Kashi Ram Gupta: That too requires apparatus and all those things.

Shri V. B. Chipalkatti: That requires industrial apparatus and not research apparatus.

Shri Kashi Ram Gupta: In your Memorandum, you have made some comments on the working of the patent office. All this leads one to conclude that you require something which may help the patent office in its working. Is that the idea of having expert committees?

Shri V. B. Chipalkatti: As a researcher for the last 10 or 15 years, I have felt some need. For example, we take some patents in the United States. We have about half a dozen patents taken in the United States. The rigour with which the United States Patent Examiner will ask questions to us, the efficiency with which he will point out to us the basis of prior knowledge is much better and it is about hundred times more difficult to take a patent in the United States than it is in India. Out of 90 per cent cases we have found out that the Indian patent office is on a free-come and free-go basis.

Shri Kashi Ram Gupta: You want an expert committee....

Shri V. B. Chipalkatti: They are not liberal. I do not claim it. They do not have the necessary experience behind them.

Shri Kashi Ram Gupta: My point is that your suggestion for an expert committee is to aid the present Patent Office in its proper functioning.

Shri V. B. Chipalkatti: Yes.

Shri Kashi Ram Gupta: You have mentioned that you have got in the last so many years 130 patents. May I know whether they are mainly for textiles and such other things or also for pharmaceuticals?

Shri V. B. Chipalkatti: We have no patents for pharmaceuticals. We do have patents for chemicals.

Shri Kashi Ram Gupta: You have said that there is difficulty in this country for the industry to utilise in the proper way the knowledge of taking patents and all these things. Is your reference to some particular industry or is it general?

Shri V. B. Chipalkatti: I think it could be easily generalised. By and large, ours is a young nation. The history of industrialisation is hardly about 15 to 20 years old and I believe that the awareness that is required for improvement either in quality or in cost is generally absent partly due to our protected economy and partly due to a lack of expertise in the country.

Shri Kashi Ram Gupta: Even in industries like textile and sugar?

Shri V. B. Chipalkatti: Yes, Sir. In textiles, we should be the leader in the world. But I do not think we are. We are only third or fourth in the list of textile manufacturers in the world.

Shri Kashi Ram Gupta: Are we wanting in money or are we wanting in something else?

Shri V. B. Chipalkatti: It is a question of totality—we are wanting in good Government, we are wanting in good integrity amongst individuals and we are wanting in so many other things.

Shri Kashi Ram Gupta: What is the main factor behind it?

Shri V. B. Chipalkatti: I am afraid, I cannot give you one answer to this. But my total answer is a lack of proper expertise in the country.

Dr. C. B. Singh: You have to your credit more than 100 patented processes and products in the country and outside.

Shri V. B. Chipalkatti: Most of our products are only in India.

Dr. C. B. Singh: Anything outside also?

Shri V. B. Chipalkatti: No. We tried in the past and there were enquiries from Israel, Australia etc. etc. but these did not materialise due to one reason or other.

Dr. C. B. Singh: Anyway, you tried in India and you have got more than 100 patented products and processes.

Shri V. B. Chipalkatti: Yes. About 60 per cent of them may be utilised.

Dr. C. B. Singh: That is a very good news. May I know what is the expenditure spent on research in your research laboratories? If it is confidential, I don't want you to tell us that.

Shri V. B. Chipalkatti: There is nothing confidential.

Dr. C. B. Singh: We are very much concerned with it.

Shri V. B. Chipalkatti: Our annual budget is of the order of Rs. 20 lakhs. This is all earned through contract research. We have no money of our own. Our Trust has limited income.

Dr. C. B. Singh: You mean certain industries offer you problems.

Shri V. B. Chipalkatti: Those who utilise our facilities offer problems and we solve them.

Dr. C. B. Singh: From your evidence, it seems that you are in favour of a strong patent protection. Is that correct?

Shri V. B. Chipalkatti: Yes.

Dr. C. B. Singh: The reason advanced by you for a strong protection is that it will help the inventor.

Shri V. B. Chipalkatti: Yes.

Dr. C. B. Singh: Our complaint has been that the patent law has gone against the country as far as the drug prices are concerned. Will you suggest something whereby, in spite of their being a strong protection, you can do something about the price control of these patented drugs?

Shri V. B. Chipalkatti: Again, I am speaking as a non-expert on drugs. The price of drugs or the price of any patented product for that matter depends on many factors apart from the patent system or the patent law. In any case, in our day-to-day work, we are hardly conscious of the existence of a patent law when the price is fixed. That by having a patent law which is supposed to be better than the existing one we will do something to the prices somehow does not convince my mode of thinking.

Dr. C. B. Singh: You mean to say that is not going to reduce the prices?

Shri V. B. Chipalkatti: There are many other factors apart from this.

Dr. C. B. Singh: What do you suggest by which the prices will come down? We are anxious to bring down the prices.

Shri V. B. Chipalkatti: I am afraid I am not at all an expert on pricing policy.

Dr. C. B. Singh: You mean to say that the pricing policy should be enough to bring down the prices?

Mr. Chairman: He is not an expert on that.

Shri V. B. Chipalkatti: I have not enough knowledge on that.

Dr. C. B. Singh: Here, in the case of a dispute, an appeal has been allowed and the appeal goes to the Government. Are you in favour of the Government being the final authority on that?

Shri V. B. Chipalkatti: Yes.

Shri D. P. Karmarkar: If I understood you aright, you want protection being given to the Indian scientist. Would you rather prefer, as a practical policy, that in the case of such products like pharmaceuticals, food, etc., the Government may themselves take the power of issuing the compulsory licence? Is that your idea?

Shri V. B. Chipalkatti: As a citizen of this country, having seen many things in our social structure, at the present moment I am chary of increasing the powers of the Government beyond the very minimum. I think if the Government does less work particularly in the industrial and production fields, the country will stand to benefit. From that point of view, taking from the inventor a certain patent and then Government giving some return for that, Government has not only to give an incentive to the inventor but also to justify that. It will be justified only if the invention comes into actual use. I believe, Government as an agency to do the second part, is not the proper agency.

Shri D. P. Karmarkar: Ten years later, when our Indian research workers will come into their own, their interest will be adversely affected. The national interest also will be affected by this reduced period of ten years in the case of pharmaceuticals and drugs.

Shri V. B. Chipalkatti: Reducing the period was not the point. The point was 'licences of right' stamped on that.

As far as the reduced period is concerned, I hold the view that the lag between the date on which the patent is applied and the date on which it can be reasonably used in India is a minimum of 6 to 7 years and if you have only ten years as the period for which the patent will be in force, then the inventor gets really only three effective years or in some cases only one or two effective years.

I consider the present 16-year period as more reasonable to the present Indian scene.

Shri D. P. Karmarkar: Just a moment ago, Dr. Singh was asking about high prices. This Committee has found that, whenever a patent is in effect and when there is manufacture, the prices of some imported medicines are inordinately put up very high. The only way in which that could be prevented from happening would be to establish some sort of a control. Would you suggest, in order to prevent such an abuse by the industry, having a sort of an advisory machinery, on which naturally Parliament would be represented, Government would be represented and technical bodies and industries would be represented? Would you think that such a machinery to advise on prices would be beneficial?

Shri V. B. Chipalkatti: I did not think about it before. But on the face of it, some kind of a machinery, by which the price system is fair, would be desirable. I really do not know if you will get the necessary information to see that the Committee works efficiently. Many times information may be suppressed or may not be given properly, but there seems to be some need for action if the feeling is that the patent system causes this type of price rise. In my opinion, if the product is new, the firm or the individual who has taken a large amount of risk gets the maximum benefits in the first few years. If you see the position in other countries, the price always goes down and down as time goes on. Personally I am not very much afraid of a very heavy price being charged for some time. If the economy is productive enough, I think prices would take care of themselves. Only in a low productive economy, all this trouble arises.

Shri A. T. Sarma: Is it a fact that some foreign pharmaceutical firms are run by Indian technicians?

Shri V. B. Chipalkatti: Yes; I believe so.

Shri A. T. Sarma: Is it a fact that at present India is in possession of pharmaceutical technicians?

Shri V. B. Chipalkatti: We have a fairly large number.

Shri A. T. Sarma: Would they be benefited if the Bill is passed?

Shri V. B. Chipalkatti: No. We do not have many researches in the field. The firm managers are there, the technicians who are running the factories are there, but many of these foreign pharmaceutical firms do not start research in India. They always say, "we depend for research on our principles in our own country".

Shri A. T. Sarma: My point is this. If they are given an opportunity, will they be benefited?

Shri V. B. Chipalkatti: It would not be automatic. In fact, if you permit me, I would like to say that between the passing of a patent law and the deriving of the benefits of that patent law, there are so many things involved that I would not venture to say that a mere passing of the patent law would get the result.

Shri A. T. Sarma: In your Memorandum you have supported the existing law.

Shri V. B. Chipalkatti: Yes—90 per cent of it—except that I would like compulsory licensing to be used more effectively.

Shri A. T. Sarma: I want your clear opinion whether the Bill will be beneficial to the interest of India or not.

Shri V. B. Chipalkatti: The answer is neither yes nor no. This will be one more Bill. In my opinion the present Act is quite adequate and let us concentrate on using the present

Act better rather than having a new Bill.

Shri R. P. Sinha: I have gone through the Memorandum of the learned witness and have also heard him. The three points which he has stressed are in regard to licence of rights, compulsory licence and the period. After listening to him I feel that the Indian interests as such, I mean, the Indian research workers, will not be benefited by the present Bill because of these three Clauses. Have I correctly understood you?

Shri V. B. Chipalkatti: To the extent the incentive part of it is lessened, it will not benefit.

Shri R. P. Sinha: After listening to the witness and also after going through his Memorandum, I find that the motivation behind the framers of this Bill appears to be mainly to curtail the abuses of the foreign patent holders who are taking too much of patents and are not utilising them, and to compel them to use those patents and not to use them in the monopolistic manner. This appears to be the main purpose of this Bill and they have not taken into account as to how to help the Indian research workers like yourself or an institute like yours. Will that be a correct conclusion to draw from that?

Shri V. B. Chipalkatti: You might draw that conclusion.

Shri K. V. Venkatachalam: You were saying that your programme of work is some sort of a contract programme, that is, you do not have a regular budget as any research institution will have. Can you elaborate it further?

Shri V. B. Chipalkatti: We are a private non-profit trust. We have a fixed income which comes in the form of dividends from the trust.

Shri K. V. Venkatachalam: How much is that?

Shri V. B. Chipalkatti: About Rs. 5 lakhs.

Shri K. V. Venkatachalam: That is your base?

Shri V. B. Chipalkatti: On that basis we try to exist and try to create work. We go to the Government of India. We go to private industries. We make schemes. We tell them, "If you do this, it will help you". Sometimes they on their own come to us and we try to create projects in which the advantage of the research work, the cost required, the time required and the results expected are all written down in black and white and if the party is interested, then they come to us and we charge them on a no-profit basis.

Shri K. V. Venkatachalam: On this basis, can you have a steady programme of work?

Shri V. B. Chipalkatti: It is very difficult. But we have been existing for the last 15 years.

Shri K. V. Venkatachalam: You just exist? So you just exist. From that point of view I would have thought that you are not strongly based.

Shri V. B. Chipalkatti: Yes, for expansion, for taking new activities, etc.

Shri K. V. Venkatachalam: You are on a hand-to-mouth basis from what you say?

Shri V. B. Chipalkatti: Yes.

Mr. Chairman: You are in favour of product patents. Am I correct?

Shri V. B. Chipalkatti: Again I want to stress on the technical aspect of this thinking. I can give you an example. Here is a wash-and-wear fabric. Tomorrow I make a new fabric. I apply for a process to do it

and also I apply for the product which is based on that process. I take both the patents. The present Bill provides facilities for taking both. But if you examine the claim of mine that I have got a new product properly made, in 99 cases out of 100, possibly that the new product claim will not be a proper invention. It can be a proper invention only if I could hoodwink the Patent Examiner because textiles have existed for thousands of years. For example, if in a pharmaceutical patent, something based on quinine was to be made as a new product, until the constituents of that new product and the effect given by that new product are sufficiently large to claim a new product, a new product patent should not be given. Therefore, even under the existing law it is possible to make it very difficult for the applicant to get a product patent very easily. If that happens some of the abuses of the present law will go away automatically. If, on the other hand, we do not give the Patent Controller finances sufficient for running his office, sufficient finances to employ experts in various fields, in which case even the new Bill would achieve hardly anything. What is, in my opinion, necessary, is to see that the Patent Controller's office becomes extremely efficient and is helped by a large number of experts.

Mr. Chairman: That is a different matter. But suppose if you give product patents, you shut out all inventions and discoveries to find out new processes. It will be a disincentive for inventions.

Shri V. B. Chipalkatti: I do not know if the product is specified properly and if the process for making the same product would be available, that process can be followed. It can well be followed and somebody else can make the same product and ask for compulsory licence.

Mr. Chairman: That comes in only when the patentee takes objection to

an infringement but if an inventor finds out an altogether new process for manufacturing the same product by a new and cheaper method and produces the product, why should he not be given patent?

Shri V. B. Chipalkatti: He may be given a patent for the new process.

Mr. Chairman: But if the product patent is maintained, it will shut out all new inventions.

Shri V. B. Chipalkatti: Is it not unfair to a person who has brought a product into the market after testing on lakhs and lakhs of people? After all he has done something for the society.

Mr. Chairman: Science is always a progressive science and you must give room for every patent to come in. It may happen that a new drug which is introduced to-day may become obsolete in 2-3 years' time.

Shri V. B. Chipalkatti: If the drugs go out of date in 3 years' time, if that statement is true, then probably what you say is true. But my feeling is that the drugs can continue for generations.

Mr. Chairman: Some may go out of use—it is quite possible.

Shri V. B. Chipalkatti: That is exactly with regard to pharmaceutical products.

Mr. Chairman: In fact except USA all other countries even to-day have got only process patents and Germany and Japan have progressed in their scientific research due to that.

Shri V. B. Chipalkatti: May be. I don't think I am competent to decide this issue in the manner in which you perhaps want me to do. All that I would like to say is that you make the product patent also very difficult and use the existing compulsory licensing system very well and then

there is no need for us to bother about the law.

Mr. Chairman: After all the object of the Patent law is to encourage research and production within the country. This law has been on the statute book since 1911 and it has not helped research and production within the country. That is why we are thinking of a new law. How do you still maintain that the present law would meet the needs of the times?

Shri V. B. Chipalkatti: I quite agree with you. It is a very good wish that something should be done to the Patent law by which the indigenous effort could be encouraged. But we had the same wish 17 years ago. I would like to point out that by having 17 or 20 national laboratories we thought we would make our country self-sufficient; but that did not happen. There are many things that go into this question of indigenous know-how being created. There were many criticisms and even people like me sometimes made criticism and in spite of all that, I believe, we are much better than what we were 17 years ago. I have no doubt whatsoever that we are going on the right lines. The democratic system is rather slow and we seem to be frustrated. But I do feel that the real encouragement is to act better rather than to proclaim better. Something like that even in this Patent Bill I see. In all this I see good wishes, good thoughts, good statements but good deeds are the great need of the hour.

Mr. Chairman: You yourself said that foreign patentees are not manufacturing their products here and they are having their research institutes elsewhere and they only import some intermediate products and perfect the product and sell it. What provision you would like to be made in the present Bill to make them to manufacture their products here?

Shri V. B. Chipalkatti: I do not see any lacuna in the law because law does not deal with the erection of new factories and the policies behind that. The erection of new factories depend on the total industrial viability of a certain scheme, of a certain manufacturing programme. Personally I do not see how the law can do this.

Mr. Chairman: What is your suggestion to induce them to start production here and also start research institutes?

Shri V. B. Chipalkatti: More efficient patent system rather than a wider law and wider powers to the Government.

Dr. C. B. Singh: He is in favour of strong patent system.

Mr. Chairman: Do you think that the present Bill does not provide for that?

Shri V. B. Chipalkatti: It will by itself not do. As far as the law is concerned, probably we can think about it after 50 years when the industrial base, the research base is really there. We are now talking of something which is not there. I can tell you that we are spending about 0.2% of our national product on research. Looking to the population and looking to the size of the industry, our research effort should have been at least about ten to fifteen folds more. It is not just there because even taking the public and private sector into account—my criticism applies to both—they are all thinking in terms of investing in new fields, not in intensifying the production in the existing fields. There is so much to be done, so much to be invested and the research effort that we are making hardly engages the attention of the industrialist and unless the industrialist is made to feel the need quality improvement and for new products, he will hardly take any interest.

Mr. Chairman: What do you mean by "artificial food"?

Shri V. B. Chipalkatti: Synthetic foods or processed foods. You have a factory for example to make tomato ketchup.

Mr. Chairman: That is not synthetic.

Shri V. B. Chipalkatti: But it is not given to you in the form nature is giving you.

Mr. Chairman: Thank you very much.

(The witness then withdrew).

(The Committee then adjourned to meet again at 15.00 hours).

IV. Business Council for International Understanding, NEW YORK.

Spokesman

Mr. Robert Meagher

(The witness was called in and he took his seat.)

Mr. Chairman: Mr. Meagher, you represent the Business Council for International Understanding?

Mr. Robert Meagher: That is right.

Mr. Chairman: The evidence that you give is public. It will be printed and distributed to our members and will also be laid on the Table of the Houses of Parliament. Even if you want any particular portion to be treated as confidential, it will be printed and distributed to our members and will also be laid on the Table of the Houses of Parliament.

We received your statement this morning. I do not know whether the members have had time to go through it. You can refer to it and if you want to stress any particular point or make a new point, you may kindly do so. Afterwards, our members will put questions.

Mr. Robert Meagher: I want to thank you very much for inviting me and for enabling me to appear before this Committee. I consider it to be very extraordinary for a Committee of a foreign government to permit outsiders like myself to come forth to discuss our opinions. I have had my past experiences in India. People have always been very open. I remember, when your Constitution was being drafted, at that time also you listened to the people from all over the world and tried to sort out different opinions and different approaches of others. Naturally I come before you merely to share my opinions with you. The ultimate decisions will, of course, have to be made by this Committee, by the Legislature in India.

I am very sorry that my statement did not reach you sooner. It has been in India for a number of weeks. But due to some administrative mistake, it was not delivered to you earlier. I apologize for that. It was beyond my control. I have not been in the United States for the past a month and these matters were being taken care of by some one else.

The statement that I am about to make today is being submitted on behalf of the Business Council for International Understanding. You will find in the Appendix to my statement a short summary of the activities of the B.C.I.U. This Committee has, over the past few years, formed a special group on investments in India and in 1964 held a series of meetings with officials of the Indian Government, primarily on the investment climate and it is really in that context that I am appearing here today. I am, by profession, a lawyer and in addition I am the Associate Director of International Legal Research at Columbia University Law School. My appearance here is not as an expert on patent law. My field of teaching is a field which is relatively new in the United States; it is called international law and economic development—it is a mixture of the two—in which we have

been concentrating on problems of investment and in relation to this, we have been drawn into topics such as foreign aid, trade and patent and copyright laws. The patent law has been one important element of the investment climate in all countries.

The current Bill is an indication of the desire of the Legislature in India to modernise India's patent legislation and to overcome what it considers to be inequities in the present patent system and also to bring uptodate certain practices which have become outmoded over the past 55 years.

In our opinion, of course, every government has the right to constantly review the laws and try to bring them uptodate in a manner which is in their own national interest. Obviously every legislature is interested in a new legislation from the point of view of its own national interest. We are delighted, as I said before, that you took some time to listen to certain outsiders' who may be affected by the legislation in India. To some of the people whom I have discussed the legislation with, including the people in Japan, Korea, Taiwan, Philippines, England, France, Germany, Italy and Canada, the legislation does, in a few places, raise some serious questions. These provisions which are most disturbing to the people I have talked to, seem to strike at the very heart of the patent system and in fact, these are the only provisions which I have been concerned with.

As I said, I am not here as a patent expert but rather to discuss those provisions which will affect the question of flow of capital, flow of technology and development of indigenous research. Some of the broad sections which will affect the people are those which permit use of the patent by the government without compensation; which permit compulsory licences or "licences of right", as you call them, without any conditions for an inquiry into the ability or means of the licensee at a fixed maximum royalty and which remove specified appeals from the judicial system.

I pause here for a moment to say that obviously there are many ways of hearing appeals. Administrative agencies or administrative courts can have just as much function as a court does. The Droit Administratives of France and the administrative courts in Belgium can have all the safeguards of a judicial body. The problem as the statute stands at present is that many of my friends and colleagues feel that it would be preferable if the statute itself stated that the safeguards which one usually finds in a court of law would also be incorporated in the underlying statute. Obviously, the regulations which would be issued subsequently under the statute could provide for such provisions. I think there was no need to ask whether an administrative court would be better or worse than a judicial court. Obviously, either one can be good. It is just a question of knowing that in the underlying statute that such safeguard provisions have been made.

We have also been disturbed by the limiting of the term of patent and that this provision has been made retroactive. It seems to us that the gains by retroactivity will rather be minimal as the number of patents involved, probably most of them, have been running for a number of years. Any way, why not finish their term the day this Bill comes into effect or subsequent patents may be limited.

We also feel on the term of patent that a ten-year period from the time of filing of the specification is a very short period of time. In Algeria which probably has the newest patent law which was passed a few months ago and the term there is in keeping with the modern trend, they have put in a term of 20 years—the average probably running between 16-18 years with a trend, I seem to feel, now running closer to 20 years.

It is always difficult for a person who does not live in a country to understand the legislative structure of another country. I remember when I first came to India the Industries

Regulation and Development Act of 1951 has just been passed and at that time I have read it and, being an American and being used to our system of law, felt that a tremendous amount of power was being given to the Government. But by the end of 1952 I had modified my opinion to this extent that the law gave tremendous power to the Government but much of this power would probably never be exercised and I was right fortunately in one case because many of those provisions which were most striking have never been exercised, or if they have been, it has always been with great circumspection. However, the role of a lawyer advising a client in New York is difficult. He advises the client that this is the law. After going through the law the client feels that it is terrible. 'But they won't apply it', the lawyer says. The client will ask, 'How do we know that it would not be applied?'. The reasonable answer is: 'anyway I cannot be quite sure that the provisions would not be applied.' All that one can say is: 'based on my own experience, going back and forth to India for many years, I do not think these provisions will be invoked', I think the Government has more powers here than they would exercise. I can tell you quite frankly that many firms telephoned me in New York before my coming here and they said, 'We read the industrial laws and are very much disturbed.' One of the laws they always refer to is the Industries Regulation and Development Act. I mentioned this because I think in the present Patent legislation there are certain provisions which also would be frightening to an outsider, but which may never be applied also—I do not know. Some of these provisions are: the section which permits the Government to take over patents, the section which permits the Government to let numerous groups use the patent under certain conditions. These conditions seem to be very harsh. Perhaps these are provisions which will not be applied—I just do not know.

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The question the BCIU is concerned with in this legislation relates basically to three main categories—the investment climate, the flow of technology into India and the development of indigenous research.

Regarding the investment climate, the first point to make there seems to me is: that the Patent Bill obviously is only one part of the many many elements making up the investment climate. I don't think that if the Patent Bill was the only question this might stop foreign investment. The question is: when you put it together with many other provisions, the cumulative effect of this particular item might be to act as a deterrent to further investment. As you know, under the Fourth Five Year Plan the Government has estimated an annual inflow of 120 million dollars of investment annually. This is considerably more than what has been coming in in the past few years. It seems to us that at this stage the Patent Bill may act as an additional deterrent to a greater flow of capital. Over the past few years since 1964 there seems to be a fairly positive approach to investing in India. In fact, when I appeared before the Watson Committee on India and advised them on the situation here, my remarks were very favourable and some of you might have read that Committee's report; there is a section on India which says that there is a constantly improving climate in India. Those remarks were based upon the testimony that I gave before the Committee at that time. However, since then a number of things have arisen, many beyond the control of the Government—the death of two Prime Ministers and many internal problems; some of these have already been resolved, I think, more favourably in relation to the recent devaluation of the rupee which probably will help to increase private investment. But, nevertheless, the climate has not been extremely strong in the past two years as a result of which it appeared to us that

the current legislation would tend to retard rather than to encourage new investment.

As far as the flow of technology is concerned, I remember, while reading through the book of Mr. K. M. Pannikar on 'The Afro-Asian States and Their Problems', he put forth one of the most succinct statements on the problems of development that I found anywhere. In his book he discusses the need for technology in India. After all this was written in the early 50's and he pointed out that a country which is developing cannot say 'We would not use the latest technology' because there is already such a big gap between developing countries and the developed countries and that to use any but the latest technique will only tend to take you farther apart rather than to come closer together. That I think is a very important point and I agree completely with him that India must use the latest technology for its development. To get the latest technology in most cases India will have to go outside India. They will have to bring in this technology through patents from other countries and to get this type of technology, it seems to me, the question one has to look at in relation to the legislation under consideration is, 'Does this law act as an incentive or a deterrent to the flow of new technology?' Is there any way—in fact this is really the underlying question—by which any Government can through legislative means force an individual to deliver his technology to another country if he does not want to or are the incentives not enough. This is really the underlying question of all patent legislation. Of course, a patent is a monopoly. Of course, it gives privileges to an individual for a limited period of time. It does that because countries have developed a theory that unless this is done, technology will not flow from one country to another. Therefore, the question is: will the current legislation in India act as an incentive or act as a deterrent to individuals who have new techno-

logy and who are outside of India? As far as technology within India is concerned, obviously every country has more power over its nationals than it has over people who are outside of the country. But even then; you can't force a man to think, you can't force a man to be creative, you can't force a man to tell what he has in his own mind, unless he feels that there is an incentive to do so. There are individuals who are very altruistic who will give up all of their knowledge and all their lives because they feel their course is right and development is important. I think, however, these are exceptional individuals and this legislation cannot be enacted to affect those people because those individuals need no legislation to come forward with their own ideas to help a country develop. What do we do with people who have the technology, who have new ideas and who feel that they will not give them up unless they are given incentives, and what should the incentives be.

Now, as I flew out on the plane just 36 hours ago, I kept playing in my mind the problems which must disturb all of you—it disturbed me very much—of how this country, which has a huge population of one-seventh of the total world population and which still has a low per capita income, can find a way to see that the latest technology is available at low enough a price so that the people in the country can enjoy the fruits of it while they are still alive. This dilemma is one which bothers me very much and I have not been able to find any simple formula for that. I think if a simple formula were available, we would know about it. How then can we solve the problem? For example, in the field of pharmaceuticals, we see a new drug which saves millions of lives; we see the drug is expensive; what can we do through legislation to see that it is manufactured in India and to see that the cost of the drug is such that the average man in the street can go and buy that drug? This is the question, it seems to me,

we all are trying to answer. And yet the only system we have been able to develop for the past few hundred years of patents system has been a system which temporarily gives a monopoly to an individual and a pecuniary gain for a limited period of time through the patent. Now perhaps there is another way but I have not been able to find that way. If you try to put pressure on somebody to tell an idea, he will certainly use a secret process and you will not get it at all. If you say to him "you must do it this way", he will say "well, I will not produce in your country at all." If you say "I will appropriate your patent", he will say "fine", because that piece of paper will not teach you how to make Tetracycline, because to make that you must have the know-how, you must have the technology and you must have the money; and in addition, you really lose more if you go round appropriating than you gain. So we come back to the same dilemma. How do we find a way to get a low-cost product which is needed by people? How do we find a way for that product to be manufactured in the country? I am afraid we still have not found the way and I don't think that a patent law which is restrictive in some of its provisions in relation to these points, will encourage or bring forth the actual movement of technology. What about indigenous research in the country itself? What about scientists within India? Does the current legislation give them an incentive to give out, to look into new technology, to develop new ideas? Once again we are back on the same question. If there is any incentive sufficient enough for a scientist here to produce the product, then the answer is "yes". If there is no incentive, obviously he will not come forward with the idea. What happened in Italy where they don't have any patent rights for pharmaceuticals? No new pharmaceutical discoveries were made. One or two new discoveries were made but both were registered in England under patents. They didn't stay in their country at all but went out of the country. Then, what about prices

in Italy? Do the Italians get the drugs cheaply? No, they don't, because what happened in Italy was there were 60 people manufacturing the same product leading to very high promotion expenses and as a result of the cost of drugs was high. So the problem is still there. This is a real problem; it is a moral problem; it is not a question of law alone. And I can only say that my sympathy is with anyone who is trying to solve this dilemma. The question is how do we do it. Can it really be done by limiting the patent rights? No. I think the compulsory licensing approach is a good approach if it is used in the right manner and it has been used historically in India and in many other countries. It has been fairly successful to get products to come out. But as my colleague, Mr. Robbins, has probably mentioned here—I don't know, I was not here—compulsory licences are almost never applied for anywhere, even though they are on the statute book. So again it is a technique which has not been probably meaningful. I think perhaps Mr. Shoji Matsui came here from Japan. I was with him in Japan and we had some discussion on this. I looked into the Japanese industry situation and I think the Japanese industry is very instructive in relation to the positive aspects of patents. I was in Japan 15 years ago and 15 years ago, Japan was very flat with great destruction, with no buildings, with no industry. But to-day Japan has one of the most thriving and dynamic economies in the world. Year after year the G.N.P. was increasing at the rate of 20 per cent per annum and even this past year it increased by 10 per cent. You consider that with the fact that they have reduced the birth-rate from $2\frac{1}{2}$ per cent to 1 per cent and you will see that the Japanese development has been truly amazing.

In Japan they used the technique in relation to the investment which I found to be exemplary. They sat down and said to themselves. "What do we do? We will develop our country with our own money and with our own technology. We have fallen

behind in technology and we have no money at this stage but we want to develop." So beginning in 1950, they took out from the dusty shelves the patent legislation which was still left and which had been in existence for 85 years and they said "let us see what we could do about bringing technology" implement their patent law is one of the considerations, and most liberal patent laws have brought in technology from all over the world. They worked the patents, they paid royalties, royalties have been fairly high, but what has been the effect of it? The effect of it has been that yes the Japanese are today paying royalties of something like—I have the figure here—I think 165 million dollars a year, but in addition from this year they are beginning to get back an amount equal to 8 per cent of royalties paid out through royalties on patents and what is much more important than that is their own scientists, having used the technology they have got from abroad, have developed new patents, have developed new processes and today the exports of just two commodities from Japan more than compensates for the total royalties that they pay and the economy of the future will be less and less dependent on foreign technology and more and more they will be creating their own patents and exporting them all over the world and in fact, you know, in this country, that the Japanese have been here and have been very much interested in investments here. I found Japanese in Korea, I found them in Taiwan. They have gone to Indonesia, exporting technology, exporting technicians, exporting scientists. So to me, this is a good example of what can happen with good positive patent legislation. The patent alone will not do this. It is not for me to suggest that any country that had a good patent bill would develop dynamically. One can say if other factors are good, a good patent bill can be a contributory factor. For better or worse, industrial development is intimately interwoven with patent rights. It is in this way that a country with a favourable

patent law would be able to attract all other elements essential to industrial development. At the moment, India finds itself in the midst of extraordinary development problems. These problems cry out for innovative approach. However, it would be a short sighted innovation which would curtail the flow of investment, limit the flow of technology and diminish the level of integral scientific and technological research. Patent rights are inextricably linked with the flow of capital, know-how, skill and experience. Tampering with industrial or property rights at this time may prove to be a major deterrent to rapid development.

Now lest it be misunderstood because when one speaks for a short time one tends to talk about negative things in general I think that the Patent Bill is without exception, that it shows a tremendous amount of work and it is a very positive step forward. My only point relates to a very limited few sections of the bill and those few sections are, as I said earlier, ones which raise questions in the minds of people—the questions of: Will the Government take over patents without compensation? Will other individuals be able to use their patents even though they do not have enough know-how and do not have enough money? Is the absence of judicial review in relation to some sections so fundamental that people would be aggrieved? I do not know perhaps you have other provisions in your mind which will be in the regulations that I am not aware of and is it really necessary to make the new patent law retroactive in relation to existing patents.

Well, I am afraid my statement perhaps has been more general than the very specialised ones of people who have been heads of Patent Offices like Mr. Matsui or who have been leaders in the Patent field for the past 35 years like Mr. Robbins or who have been expert chemists like those you had from Germany but B.C.I.U. did feel that it would be

helpful if you would allow us to express our opinion and I must repeat once again, we feel very indebted to you to permit us to come to your legislature to discuss our point of view. I hope that my Government will be equally kind and hospitable in inviting people from your country when we discuss our patent legislation which is being studied by a Special Commission at the moment and of which Mr. Robbins who was here is a member.

Thank you very much, Mr. Chairman.

Shri Kashi Ram Gupta: The learned Advocate has suggested that there should be proper climate. I want to bring to his notice that so far as patents other than pharmaceuticals are concerned, the present Bill has got 14 years from the date of completion of the specification while the old Act provides 16 years from the date of application and hardly there may be a difference of about one year or less than one year. Therefore, I want to know his opinion about this aspect of the Patent Bill.

Mr. Robert Meagher: In relation to the 14 years provision, I do not say that this is a major hindrance. The 14 years provision, I think, is a modification away from the direction of the world trend which is towards increasing the patent period. However, I do not say that a major problem arises in itself from going from 16 to 14 years, but I might state here that one of the difficulties of the current proposed legislation relates to the period from which the time begins to run. The filing of the specifications is not the time when you have a patent. It seems to me to be preferable to have the time run from the time of the sealing of the patent.

Shri Kashi Ram Gupta: My point is under the old Act, it is 16 years from the date of application and the

present Bill has got it from the completion of the specifications. Actually the difference will be hardly one year, but if you say that it should be from the date of sealing in this case as well, it will mean more than 16 years.

Mr. Robert Meagher: I think if it was more than 16 years it will be closer to the average which is probably 17 years world wide and which is now, in many countries, being extended to 20 years.

Shri Kashi Ram Gupta: Are you aware of the fact that Japan has got 15 years only?

Mr. Robert Meagher: Japan does have 15 years only. United States has 17 years and other countries have different periods. However, the newest legislation—the Algerian Bill—which has just been passed, does have 20 years and other countries are considering—though they may not pass—bills which will increase the period from 15 to 20 or from 17 to 20 and so on.

Shri Kashi Ram Gupta: Are you aware of the fact that Italy has got a Bill now in Parliament, which gives only 10 years for pharmaceuticals.

Mr. Robert Meagher: Yes. I am aware of that and there are 3 or 4 other countries which already have legislation existing which gives only 10 years.

Shri Kashi Ram Gupta: There is a Model Law on inventions given by the B.I.R.P.I. This Model Law on its page 49 says that a patent can be for at least 10 years from the date of sealing of the patent. The only difference is they say it can be for 10 years at least and in our country, seeing the conditions here, it can be for 10 years quite right. This is the only difference which means that we are not going against the basic point raised in the Model Law.

Mr. Robert Meagher: If the Model Law says 10 years at least, in India this could, in my opinion, certainly be 12 to 14 years rather than 10 years. Under the present statute it is from the date of filing the specifications. If you keep the present language in the legislation, it would seem that you would have to use 14 years to be assured of 10 years.

Shri Kashi Ram Gupta: If the present Bill is amended according to you, then it would be 10 years from the date of sealing. Will it be agreeable to you?

Mr. Robert Meagher: It would be much more favourable. We are talking how long does it take from the time a man gets a patent and begins to sell. From the moment a patent is sealed you do not begin to make money or you do not get the return. The standard should be that when an individual makes a fair return of his patent, the patent should cease. Arbitrarily, we have to use a period of years for different patents. If you talk of 8 years, then obviously you reduce the patent period considerably. So that would depend on how long you have to work a patent in India and how much time he is given to get a fair return of his investment.

Shri Kashi Ram Gupta: In some countries concerns having their own research and at the same time enough capital to work in a regulated way, and therefore research expenses and the expenses for invention of patents are part and parcel of the whole year's programme. They are allowed as revenue expenses in Income-tax law. You cannot say it is an isolated case.

Mr. Robert Meagher: In relation to that point, as you know, our structure is set very much on a cost accounting basis. If we have research going on in relation to one particular item, it would always be listed on one account. We know how much the cost of doing that is; knowing the costs

we cannot estimate the profits on it. Obviously, when we deal with many products it becomes more and more difficult to separate them out because some expenses must be allocated to all items. However, we try through our system to have some idea of the cost on each item, so that the research costs may be listed as business expense in our tax returns. This is one of our incentives which we have used to encourage people to invent. Perhaps I am not familiar enough with your tax legislation. Perhaps that sort of incentive is also necessary here. But I am not here speaking about the Tax Bill today.

Shri Kashi Ram Gupta: Now, when it is part and parcel of the whole structure and you say it is not easy to find out separately what the cost will be on each item, then the big companies can afford to have a patent incentive even when the period is about ten years.

Shri Robert Meagher: It is like comparing a rich man and a poor man. I do not know whether that is true or not. A man who is poor may give up an invention because he may not be able to carry on for long. A man who is rich can give more time to make an invention. Most of the large-scale research done in the USA is not by the small companies but it is done by big companies. And we have found that the creativity comes because people give time and spend the money to do research. I do not think you should penalise a man because he is willing to devote a large percentage of his time and money for research.

Shri Kashi Ram Gupta: Should the period be reckoned in connection with the total cost structure so that the amount may be made up within that period?

Mr. Robert Meagher: Actually I am not qualified to speak on price structure which is a highly technical question in relation to patents. There are all sorts of conflicting testimonies, in which pharmaceutical companies claim that this has been so much for

research and they get a small return. One of the reasons this information is not readily available in the USA is because it is a comparative information and we do not have the problem of high costs because we have income-tax which takes care of high profits. If you make high profits people are taxed for that. I do not see that this question really is that key to an understanding as to how long a patent can pay.

Shri Kashi Ram Gupta: You say the business profit should be there and patent is only a fraction of it. There are other hurdles more formidable than patent. Now even if Patent Law is framed according to their wishes they will come with other difficulties. Therefore, in the context of this, when patent is a small fraction how is it they are not looking on these things from that angle?

Mr. Robert Meagher: We have already spent many hours discussing each of these questions including import duties, export duties, management, spare parts, raw-material sources, etc. It is not that we are discussing these questions today. We are discussing these questions every day. I have been discussing the same questions with Mr. Bhootalingam, Finance Secretary to the Government of India. When your Prime Minister came to the U.S. I met her on three occasions in New York; when your Minister for Planning, Mr. Ashok Mehta, came to the U.S. I met him and discussed these questions. It is not that we are not discussing these questions. We are trying. The obvious reason why we are discussing patent here is because it is important. When I say it is one of many things I do not say it is un-important. If it is un-important I would not be here.

Shri Sham Lal Saraf: The hon. witness knows that a number of witnesses have come before the Committee. He has confined his position to the following four items:

- permit use of the patent by Government with compensation.

- permit Licence of Right without enquiry into the means or ability of the licensee at a fixed maximum royalty.

- Remove specified appeals from the judicial system.

- Reduce the period of validity of existing patent.

May I know from these four points of view what does he considers to be 'out-moded practices' which are to be taken into consideration.

Mr. Robert Meagher: Perhaps the terms 'out-moded practice' was a wrong one. What I felt was a reduction of period was out-moded i.e. the term of the patent reducing to 10 years in relation to pharmaceutical industry, I think, is going against the world trend.

Shri Sham Lal Saraf: I only wanted to seek clarification, that is, when you said it is understandable that out-moded practices are done away with or at least amended in order to suit present day requirements and keeping that in view I would like to know from the above four points of view what would you consider to be the out-moded practices which you would recommend to be amended or done away with?

Mr. Robert Meagher: I do not think I linked together these four points with out-moded practices. If I did, it was not my intention. What I did feel is under clause 48 where the Government may use the patent without compensation I do not think this makes very much sense to me. I think Section 46 of U.K. legislation is preferable. I do not deny, under specified limited conditions, Government exercising rights which are necessary in the national interest for a limited period of time and it seems to me that in England when tetracyclin was bought from Italy the patentee was compensated. So I will suggest that under Section 48

there should be compensation for use of a patent.

Further, I think that the idea of a fixed maximum royalty at 4% of the net bought ex-factory price is arbitrary and obviously any system of settling royalties has to be arbitrary but it is interesting that India is the only country in the world that has set a maximum royalty price. Now I do not see any need for this. I think there is a way of determining in particular cases through discussion, through appeals, through hearing, etc. what would be a fair royalty. In most countries they let patentee, once licensed the patent, enter into an agreement to pay what he feels as a fair price for it. I know this is a very complicated question in India and it is for reasons which are not directly related to Patent Law. If you wish to do business in India and you want to have equity partnership in a company—frequently there is a question of getting equity partnership—the question of royalty price becomes irrelevant. In other cases you give up know-how or a patent right for a royalty, each case goes to Ministry of Finance and there are discussions. Again it seems to me, if I would be advising your Government, it should handle foreign investors rather than handling foreign investments. I would leave them much more ambiguous and interpret some results but the results should come administratively through the Ministry of Finance and not through a statute. So I do not feel it is necessary that that percentage should be put in the Bill.

Shri Sham Lal Saraf: Now, for instance, in the case of the Government where bulk purchases of pharmaceuticals and drugs are needed for Government requirements and the patent holder or the firm that has registered patent is not in a position to supply adequate quality and quantity to them, do you think, at that time, Government will be justified in attaining this authority under the Law to get the supplies from outside the country or from those patent holders elsewhere?

Mr. Robert Meagher: As I understand the question, please correct me if I am wrong, what you are saying is if Government wants to buy drugs in a bulk manner because of a situation, let us say a cholera epidemic, and Government wants to get vaccine for cholera and the company supplies them all the cholera vaccine that they can and they have to buy from outside the country should the Government have to pay the compensation?

Shri Sham Lal Saraf: The right which the Government has attained under the present provision, do you think that in those circumstances it is justifiable?

Mr. Robert Meagher: I think that if there is a major epidemic, if there is a war, if there is a flood, if there is a drought, if there are any of these many things which can arise before any Government, and it is a tremendous emergency, then, obviously, one would feel that Government should have powers to act in those cases. I think, however, that those provisions could be explained in greater detail in the Bill; I think they should be specified in the Bill, and I do not see that there is any problem in doing so.

Dr. C. B. Singh: You have elaborated on four important points.

One of the provisions in the Bill seeks to differentiate between drugs, chemicals and other patented articles so far as the period of the patent is concerned. Formerly, the period used to be 16 years for all patents; now, we have sought to bring it down to 14 for other items, and 10 for drugs, chemicals and food articles. What do you think about this kind of differentiation in regard to the period of the patents?

Mr. Robert Meagher: Personally, I do not see any need to differentiate between the two. However, this is a question which it seems to me each country must decide within its own context. There may be factors here which I am unaware of, but it does not seem to me that in most countries this

distinction is made. However, there are some countries where distinctions have been made in relation to pharmaceuticals and food articles. The provision which you have in this Bill in regard to chemicals goes beyond what any other country in the world has in relation to its breadth of coverage; so far as pharmaceuticals and food products are concerned; when taken out into a more limited context, there is a distinction, in a number of countries. Whether there should or there should not be is a question obviously within the context of each country, and obviously, this committee is better equipped than I am to answer this question.

Mr. Chairman: Your country has also appointed a committee to go into this question.

Mr. Robert Meagher: My country has appointed a committee to go into the question of patent law in general.

Mr. Chairman: And for also reducing the period of patents for drugs etc.

Mr. Robert Meagher: One of the suggestions before that committee is to reduce the period in respect of drugs.

Mr. Chairman: Canada, New Zealand and South Africa also have appointed special committees.

Mr. Robert Meagher: That is right; as a result of the Kefauver Committee hearings.

Mr. Chairman: New Zealand agreed for restriction on drug patents. Canada suggested abolition of drug patents. In the USA, on the Bill it was contended that three years would be an ample time to recover the research outlays, and a maximum royalty of 8 per cent was suggested; there was also a suggestion for unrestricted licence which included grant of technical information required for manufacture of the patented item. The Simon commission in South Africa suggested five years for drug patents.

Mr. Robert Meagher: A number of suggestions have been made in different countries. As regards the one you mentioned in relation to the USA, though they were introduced by the Kefauver Committee, they were all defeated and rejected by the legislature.

The question here is one of emotion at one level and of real concern at the other, and they are mixed together. The problem arises this way. You travel in the country and suddenly you come up against a situation, and you see people in a horrible situation and they need drugs, but they do not have the money to pay for them. Immediately, you say, 'We must find some way to do this'. But there are a number of ways in which it can be done.

Mr. Chairman: The same thing happened in the UK also. Immediately after the second World War, UK had authorised a particular company to import a particular drug. One of the patentee companies went to the House of Lords and filed a suit against the UK Government, and the Lords held the case in favour of the UK Government. I suppose you are aware of it.

Mr. Robert Meagher: Was it not the tetracycline case?

Mr. Chairman: Yes.

Mr. Robert Meagher: That was just recently; it is a relatively recent case. The decision came down in January, 1965. I was in India at that time.

Mr. Chairman: Almost every country is trying to reduce the period of the patent in relation to drugs and food articles.

Mr. Robert Meagher: But in England, the following year, namely this year, they have stopped importing that drug from Italy because they found that the quality of the goods that they were getting from the unpatented sources was bad and unreliable, and in addition they felt that this was not the best way to handle it.

I do not mean to suggest here that I am in any way in favour of people taking outrageous advantage of people who are in need. What I am suggesting is that there are many ways in which these needs could be satisfied.

For example, in the USA also, we have many poor people who have diseases and who need medicine. But the way we solve this problem is that Government have clinics in hospitals where the drugs are given to the poor people, and Government pay for them. It means in turn that the wealthier people in society who are paying higher taxes are paying for the drugs which are given to the poor people.

In England, this problem has been taken care of through the national health service system, where the people who are paying taxes are paying a part of this money into the medical system so that the poor people can get free drugs. I think that would be the proper way to do it than to take away the patent rights.

Dr. C. B. Singh: Having agreed that there is a need for protection, will you agree that in the case of medicines and food articles, the patent may be granted initially for a period of ten years, with a further chance of one or two extensions in case there is such a need and the party is able to prove that he has not been adequately compensated for his labours? If such a provision is made in this Bill with chances for extension, will that be an improvement on the present Bill?

Mr. Robert Meagher: I think that if there is a chance of extension, that would be an improvement on the present Bill. But if you ask me whether or not I believe that this was the right way to do it, my answer would be 'No', because to add one more administrative step which would take more time, which would be arbitrary and which would give no assurance in any case that there would be an extension seems to me to be a very backward way of doing it. Would it be an improvement? Yes. Would it be the best way? No.

Dr. C. B. Singh: We have got our own problems. Probably you are asking for an ideal thing which is not possible. We have got our difficulties. That is why this suggestion has been put forward. If there is a chance given for extension, do you agree that it would be an improvement on the present Bill?

Mr. Robert Meagher: Most certainly it would be an improvement.

Dr. C. B. Singh: You have laid stress on three points namely licence of right, compulsory licensing and revocation. These are very important points. In regard to compulsory licensing, the provision is that after three years, when the parties are agreeable to give proper compensation a licence can be issued. What have you to say on that?

Mr. Robert Meagher: I think that that is not a new provision. I think that the concept of compulsory licensing is used in many countries, and I think that the main time should be the time when the patent is not being worked or is being worked to the detriment of the country, in which case I think the country should be able to get somebody who will be able to work it.

Dr. C. B. Singh: Would you agree to any provision being incorporated in the law specifying that under such and such circumstances compulsory licensing can be resorted to by the Drug Controller or by Government?

Mr. Chairman: That provision is already there.

Mr. Robert Meagher: I think that it is already there in your Act at present.

Dr. C. B. Singh: You have taken very strong exception to the provision regarding licence of right. It is because of certain very difficult circumstances that we have thought of this provision. Under this provision, as soon as a patent is granted, a licence of right can also be granted immediately. You have taken very serious objection to this provision, I think?

Mr. Robert Meagher: I take objection to this provision, because it seems to me that if I spend, whether I be a company or an individual, a great deal of time in developing an invention or a patentable item, then I should at least get an opportunity to work the patent myself for a limited period of time. If I do not do it within that period, then Government have a right to say 'Let us find out some other party that can do it, and let us get on in the country.'

My answer to the question is that I think that it is important to remember that endorsing the patent with the words 'licence of right' is not particularly appealing to someone who has a patent because there would be no great incentive for him to come to India with his patent.

In that case, the greater loser is India, because he can go to other countries where there is no licensing of rights and get his patent and also develop new drugs and adaptations and therefore there will be a greater gap in your development.

Dr. C. B. Singh: What is your suggestion?

Mr. Robert Meagher: The compulsory license provision you have is satisfactory to achieve the ends which you need. I do not see why licence of rights section is necessary.

Dr. C. B. Singh: Do you suggest its complete deletion?

Mr. Robert Meagher: Yes.

Dr. C. B. Singh: Some countries have process patents, others have product patents, while some others have process-cum-product patents. In your opinion, in the developing countries what is the modern tendency?

Mr. Robert Meagher: The new legislations in U.K., Australia, New Zealand, Ireland and Algeria would indicate that the trend is towards product patent. But in the U.S.A.

we say that this is more a distinction of form than of substance, though there is much talk about the great difference between the two.

Dr. C. B. Singh: What is the reason for this trend?

Mr. Robert Meagher: The real reason, I think, is administrative. You find a tremendous number of difficulties in finding out what is a process. As a result, in countries like Germany, Switzerland and Scandinavia, where supposedly they have process patents, they actually turn out to be product patents. So, for all practical purposes, any good patent attorney today will be able to turn a process patent into a product patent.

Mr. Chairman: Just now, except the USA, no other country has changed the law.

Mr. Robert Meagher: No, but there is new legislation in the offing in the countries I mentioned.

Dr. C. B. Singh: Suppose somebody infringes a patent, on whom should the burden of proof of the infringement lie?

Mr. Robert Meagher: It should always be on the second party coming forth with a new process.

Dr. C. B. Singh: If we make such a provision, will that be an improvement? It will be more acceptable to you?

Mr. Robert Meagher: Yes, I think it will be a very definite improvement. It will be much more acceptable to me.

Shri P. K. Kumaran: What makes you think that one of the prime purposes of this Bill is to create a climate of investment in India?

Mr. Robert Meagher: I do not think that one of the prime purposes of this Bill is to create a climate of

investment in India; what I think is that the introduction of a new piece of legislation in this field has an effect on the investment climate.

Shri P. K. Kumaran: Do you know that in India our experience has been that because of these patent rights which are already existing, processes developed by our scientists we are unable to use? So, it is only to create conditions for exploiting the know-how available in the country that this Bill is introduced. Why do you think it will not help India?

Mr. Robert Meagher: This question is a highly technical one. If there is a reasonable patent law, there should be reasonable protection for the person who first develops a patentable item. I do not think we should be able to avoid this by using legalistic techniques, which actually go against the underlying purpose of protecting the patent for the first person.

Shri P. K. Kumaran: Is it not a practice in the drug market to make slight changes in a drug and market it as some other drug and make huge profits?

Mr. Robert Meagher: No. They would rather license it to four or five companies, as in the case of tetracycline for example, and get royalties from them.

Shri Peter Alvares: In developing countries there is always concern for investment incentives as well as development in technology. In the pharmaceutical industry our experience is that the patent system has been utilised to import drugs more or less at the intermediate stage, with the result that the process is not worked out here. Licence of rights tries to take care of this situation. Does not the provision for licence of rights provide for the working out of the technology inside

the country so that the country can develop as fast as possible?

Mr. Robert Meagher: Actually, let us put the question in a more realistic context. In 1955 I came to this country on behalf of a pharmaceutical company, who happened to be a client of my law firm in New York. At that time we were just having some exploratory discussions here, and I found that the Government at that time would not permit these people to come to India. They were going to provide almost new technology, but they could not come in. We could never get permission under your Industries Development and Regulation Act. So, these questions seem to be theoretical, because, apart from your patent law, you have got a Ministry of Finance, which does not permit just anybody to come here.

Secondly, as far as these drugs are concerned, the steroid drugs are now being made in India and it seems to me that more and more of the drugs which were imported are being made here. I do not know if you can force a company to make these drugs in India.

Now, I come back to the same question. There is no way to force a man to do such and such a thing for less than what he considers he deserves. If he does not want to give it to you, you may say, "Leave this country" and then he will go away. The point is this. We go back to the patent system, an arbitrary, system prevailing from 200 years, and gives an individual a temporary monopoly for a period of time. At the end, what do you gain? You gain firstly, a new factory; secondly, new technology; thirdly, a number of Indian scientists and technicians, because under your laws you require Foreign Companies to train Indian technicians. These technicians use the patented processes and they develop new processes which they in turn patent as the Japanese have done.

There are only three or four countries in the world where the majority of patents are not held by foreigners. I think Japan, Germany and the United States are the only countries in the world where the majority of patents are not held by foreigners. In the United States, it is only 20 per cent; in Germany and Japan, it is 30 per cent which is held by foreigners, but in countries like Canada, it is 90 per cent as it is in India. The figures generally run from 65 to 90 per cent, where patents are held by foreigners. The holding of patents by foreigners is neither good nor bad. The question is whether that technology of patent is developed in the country and whether the people in the country develop their own ideas and create their own products which in turn gives them the ability to create new patents which are then exported to other countries.

Shri Peter Alvares: You have referred to the investment climate in India. From the liberalisation policy mentioned by the Finance Minister during the last year, you will see that the investment climate is so good that there is hardly any reason to fear that the new provisions of the Patents Bill would retard the investment. From the survey of the Reserve Bank in respect of the profitability pattern, it is seen that while the profitability of the USA and Britain in India is the highest in any country in the world, in their domestic sphere it is the lowest. Therefore, the American and the English investment in India earn them the highest profitability of any investment in any other country in the world, and in both these countries the return on investment in domestic sphere is the lowest profitability.

Let me give you some other figures. The Government of India have circulated to some of us in the Finance Consultative Committee, the figures of investment for the years

1962, 1963, 1964 and 1965. As far as the United States and the United Kingdom are concerned, the investment is the highest; in 1962 it was 10.9 million; it was 13.29 million in 1963; 5.84 in 1964 and 11.68 for the last year, 1965. In the United Kingdom, it is similar. So, the table of investment within the last five years shows an increase both for the United Kingdom and the United States. Since then, the Finance Minister has given certain concessions for regarding the profit and ploughing it back and so on. In view of the increasing ratio of investment in the United Kingdom and the USA companies, how do you have the fear that the Government of India's proposal as contained in the Patents Bill would retard investment?

Mr. Robert Meagher: Your question is a long and complex one and I shall try to answer it briefly. First, in relation to the profit figures, these figures caused me some concern for a period of time because we could not understand it, and many of my clients are getting back something like two per cent on their investment including one of the largest U.S. investors in India. Last year, the profit went below two per cent on investment. These are rather curious. The Reserve Bank figures are misleading. There are certain investments that were made a long time ago in India and the returns were very good. The investment that has been made in more recent years, and the figures of expenses are not quite as good, but I find that the profitability is not the only criterion for investing, though obviously it is a very important criterion. I think that the average flow of investment shown in the *Economic Times* of India dated 23rd December, 1965 will reveal that the annual average of 1956 to 1961 was 82 million dollars. In the years 1962 to 1964, it was 62 million dollars; in 1966, it dropped down to 50 million dollars. I feel that the situation has not been good

for a number of reasons, and really, the problem is one which is very difficult and it will take a long time for me before this Committee to discuss these things. But in brief, let me say that it disturbs me very much, as a person who likes India. In Taiwan, which has a population of 13 million people, there is more foreign investment currently than in India which has a population of about 500 million. Indian market must get into South-east Asia and open their investments there and India must export to those countries. Otherwise, all these will probably be lost to the Chinese in Taiwan. India must develop her industry and export.

I have just come from Korea and Taiwan. I saw there a tremendous surge of investment and a client of mine who had been here said that he has found the investment climate much more favourable there. When I say this, I am not being theoretical. I am not suggesting anything in a Machiavellian fashion. But I may say that those big firms of the United States are interested in India but they will go wherever they find conditions to be best. The BCIU and others are interested in India's development. Some who are not have yet may invest here some day. But people like the ESSO, Union Carbide, ITI and Firestone are here in India. They are not people who might come here. They are here because they like India and they want to see India develop. They want to see the investment climate develop. They have been here for a number of years and they would like to see India develop quickly, and they are interested in seeing if there is some way of moving ahead more quickly.

The point made about the Reserve Bank of India's figures about profitability may now be referred to. They may be right or wrong, but that will not increase the investment. I was sent down here to

speak on the Patents Bill. I want to make my points here on the Patents Bill, and not on foreign investment. If your Committee is on foreign investments, I will be glad to discuss each of those points on foreign investment.

Shri Peter Alvares: You said that this has an effect on foreign investment. The foreign investments in India are on the upgrade, and so that is a relevant point here. The American and English people are also investing here in a larger way and so, I referred to it. It may not be very important to you, but it shows that the profitability of American and English enterprises here is high. I am not saying this with any hostility, but their investment profitability is the highest in India, and their investment ratio and their profitability are much higher than their domestic produce.

Mr. Robert Meagher: The total from my country is 250 million dollars. It is spread over 15 to 16 years. In fact, some of it came before that. The Union Carbide has been here for many years.

Shri P. K. Kumaran: You want India to become like Taiwan?

Mr. Robert Meagher: Only to the extent of being able to tap the dynamic investments and gain markets overseas as Taiwan is doing. I am not interested in the political aspects.

Shri A. T. Sarma: You have said:

"It is not likely that a restrictive patent bill will encourage Indian scientists and technologists to carry out fundamental research in India."

Would you enlighten us on this expression "restrictive patent Bill"?

Mr. Robert Meagher: Suppose an Indian scientist sits down, spends a number of years and develops a new drug. If the day he introduces it

everybody in the country can start producing it, there is not going to be any great incentive to produce a new drug; he might as well invent something new in steel where he will have some protection. The Indian patentee is in no better or worse position than the foreigner. The Indian scientist doing research in fields which are most restrictive like pharmaceuticals may end up giving the product of his research not to India as you expect but to other countries where his patent rights can be protected. This happened in regard to Italian drugs.

Shri A. T. Sarma: The provisions of the Bill are based on the recommendations of the commission appointed by the Government and we consider the provisions are in the best interests of India. We do not consider it a restrictive Bill. Do you agree?

Mr. Robert Meagher: If I agreed with it, I would not have made the remarks I made. Certainly in this case, the decision is not going to be made by me. I am just giving my comments and they may be rejected if they are not effective.

Shri A. T. Sarma: Do you suggest we should follow the same policy as in Italy? In India there is already a patent law whereas Italy has no such patent law.

Mr. Robert Meagher: I think the existing legislation in India in relation to the points I mentioned; is better than the proposed new Bill.

Shri A. T. Sarma: Do you want the existing Act also to be abolished?

Mr. Robert Meagher: I have never suggested that.

Shri A. T. Sarma: There is a vast difference between Italy and India. Do you agree?

Mr. Robert Meagher: Your new Bill in relation to pharmaceuticals is more restrictive than the legislation now in force. As a result of this bill, you may limit the amount of research in pharmaceuticals and certain chemicals.

Shri A. T. Sarma: In your memorandum you have referred to our fourth five-year plan. Do you think the plan will be economically affected if this Bill is passed?

Mr. Robert Meagher: Your fourth plan envisages a certain amount of private foreign capital. If you pass a patent bill which tends to become more restrictive, that will be one more factor which might limit the flow of foreign capital.

Shri R. P. Sinha: You say this Bill will hit Indian research and Indian scientists and Indian industry as well. Suppose we have a chapter separately dealing with patents and discoveries made in India separately and thus discriminate between those patents and other patents and discoveries made outside India. Is it the theoretically possible?

Mr. Robert Meagher: I do not know whether it is possible or not; I will have to think about it. I am not familiar with any legislation anywhere else in the world like that. Even if it is possible to do that, I do not think it would be a worthwhile exercise because it would be going against all international trends and conventions which presently exist.

Shri R. P. Sinha: Suppose we have such a provision. Will it debar us from becoming a member of the international body?

Mr. Chairman: I think it is not a proper question. It is hypothetical.

Shri R. P. Sinha: Our experience has been that certain patents taken out in India have been abused and used to the detriment of the national interest. Hence the provisions in the Bill have been made to correct

those abuses. If we give certain reserve powers to the Government to be used only in extreme cases of abuse, what psychological effect do you think it will have on the foreign investor?

Mr. Robert Meagher: The real question here is that there should be a fair hearing for any individual whose patent is going to be revoked. I do not think it should be an arbitrary decision or a decision made just by the Controller of Patents. I think the individual should be notified that it is the Government's intention, because of the following reasons, his patent should be revoked as it is against or in the detriment of the national interest of India, and asking him to appear within ten days so that he may be properly heard. He may be allowed to bring witnesses if so required. After that, he should be able to appeal to a court of law and only if the court agrees with the decision should his patent be revoked. The question here is not to encourage individuals to act against the interests of the country which has granted the patents; the question here is to see that there is a fair hearing and rights are not taken away from individuals for arbitrary reasons. If for other reasons the Government thinks it proper to revoke the patent, fair compensation should be paid to the individual. That is the real concern, and the concern is not that a man should be able to do bad things in a country and he may be excused just because he has got a patent.

Shri Bade: You have said that this Act should not be retroactive. The main purpose of bringing this Bill is to fight against monopoly. The foreign manufacturers, after taking patents for processes from R-1 to R-37, block the Indian manufacturers or inventors from doing anything. Then they create a monopoly and exploit the Indian market to the extent of several crores a year. They also do not manufacture the products in India and they import

the patent medicines from abroad. Therefore, why should not this Bill have retro-active effect?

Mr. Robert Meagher: The problem with retro-active pieces of legislation, international or even national, is basically this. An individual enters into an agreement. He comes into your country on certain conditions. You tell him that under the present patent law he may have patent for 16 years. In good faith he comes and develops the industry here. If all of a sudden, after three years, you tell him that from 16 years you are cutting down the period to ten years, and that too from the date of last filing the specifications, and because he has already completed three years he will have only another four years, that would not be fair. My real objection here is, I do not think it is a good procedure for any Government or any individual to enter into an agreement with another person and then basically change the terms of agreement unilaterally. This is not the real approach. If monopolies are your problems, and to some extent in India monopolies are the problem, why not have a restrictive practice Acts as in Germany, Britain or France, like the Sherman Act, the Clayton Act in the U.S. and so on? Why do you not think of other ways of tackling that problem. To amend the patent legislation is a very oblique way to tackle this great complicated problem and it will only destroy the mechanism of patent.

Shri Bade: Look at clause 90 of the Bill. Are these not reasonable grounds?

Mr. Robert Meagher: The grounds are there. If you turn to clauses 84, 86 and 89, the question is one of having proper appeals before a judicial body. Clause 84 does not permit that. Clause 84 provides for appeal to the Central Government. The proper approach is to allow him to have a judicial appeal. The Government, obviously, has the power, any time

it feels that patents in general are not in the national interest, to do something about it.

Shri Bade: Even if the patentee is not able to manufacture in India, it should not be revoked?

Mr. Robert Meagher: What I am saying is, if an individual violates the regulations, you should give him a hearing, allow him to appeal against the decision and with the approval of the court revoke the patent.

Shri Bade: All the foreign pharmaceutical manufacturers have objected to this. I have seen that many of the firms, in Bombay and other parts of India, are importing everything from abroad. The know-how is never known to our scientists.

Mr. Robert Meagher: There are no pharmaceutical companies today in India who do not bring in new technology, because your Government would not let them come in.

Shri Bade: May & Baker have taken 57 patents and they are exploiting only two at the cost of our poor consumers. Is it not our duty to pass such a legislation?

Mr. Robert Meagher: Let us suppose that they have only two patents in India and the rest 55 are outside India. Would you be in a better position then?

Shri Peter Alvares: Then anybody can work the other 55.

Mr. Robert Meagher: It is not so easy. Patents are not patents on paper. This is not the way patents are worked. If you do not have the technology, the know-how and the capital, even if you have all the patents in the American Patent Office, you would not be developing industries necessarily.

Shri Bade: You have said that there will be no large-scale investment climate for foreigners. With 45

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crores population and devaluation, is there not sufficient attraction for investment?

Mr. Robert Meagher: If you are asking whether devaluation is not an incentive, if I had invested 150 million dollars in India and put it into rupees, I would be getting 35 per cent less today than what it was two months ago. If I am going to bring in new investment, obviously it would be an advantage.

Shri R. Ramanathan Chettiar: In the preface to your note you have stated:

"The patent Bill appears to be moving against the trend to encourage new investment in India."

You have ended by saying:

"Tampering with industrial property rights at this time may well prove a major deterrent to rapid development."

How have you come to this conclusion?

Mr. Robert Meagher: For example, if you give a licence of right to a man to develop a new drug in India, it will discourage foreign companies from making invests in India, specially in the pharmaceutical industry, because they know that at any time the Government can give a licence of right to anybody in India to manufacture such drugs. From that point of view, there is a limitation to foreign investment or flow of capital. Then, when I speak of property rights I mean patent rights.

Shri R. Ramanathan Chettiar: How does the Bill interfere with the industrial property rights?

Mr. Robert Meagher: Now the property right or patent right runs for a period of 16 years. If you change it down to 10 years and then, in addition, make a licence of right,

you interfere with the property rights.

Shri R. Ramanathan Chettiar: In other words, you want perpetuation of monopolistic tendencies on the part of big cartels like Parke Davis and Pfizer.

Mr. Robert Meagher: The first largest 15 companies in India are not American companies. They are Tatas, Birlas, Sri Ram, Dalmia Jain and so on.

Shri R. Ramanathan Chettiar: I am speaking of pharmaceutical and drug industry and I enquired whether the bringing down of the period from 16 to 10 years will affect the industrial property rights. It seems you want perpetuation of foreign interests in the drug industry.

Mr. Robert Meagher: I want the patent law of India to be like the patent law of any other country, so far as the period is concerned, so that technology can be shared, because we have not found any other way to do it. By the very nature of it, patent is a monopoly. By that patent you give a man a monopoly for a fixed period of time. I am in favour of patents and they always involve monopoly. However, we do not know any other way of transferring technology without having monopoly.

Shri R. Ramanathan Chettiar: In reply to a question you stated one of your firms, whose investment is of the order of 90 million dollars did not get more than 2 per cent. I do not know to which industry you are referring to.

Mr. Robert Meagher: Not pharmaceutical industry.

Shri R. Ramanathan Chettiar: I will confine myself to drugs and pharmaceuticals and I will give you certain figures to allay such fears on your part. If you take the Reserve Bank of India Bulletin for November

1964 you will notice that in 1962-63 the total investments of foreign interests in the field of pharmaceutical and drug industry was of the order of Rs. 14 crores and they have taken away as dividend Rs. 2 crores and Rs. 5 crores by way of royalties, making a total of Rs. 7 crores on an investment of Rs. 14 crores. This is the only country which enables you to get a return of 50 per cent on your investment.

Mr. Robert Meagher: The same argument was given in my country before Senator Kefauver by the pharmaceutical industry. Well, I suppose, if one has money for investment in shares he would be well-advised to invest it in pharmaceuticals. I do not see its relation to this question. I have no argument because I do not have all the facts. I have no doubt that profits in some industries have been very good. I have no doubt that in pharmaceuticals they have been fairly good.

Shri R. Ramanathan Chettiar: Which is the industry you are referring to?

Mr. Robert Meagher: I cannot mention it. It is not pharmaceuticals.

Shri R. Ramanathan Chettiar: In my experience of a long period I have not seen even a single instance where a foreign investment gets a return of 2 per cent.

Mr. Robert Meagher: After the meeting we can discuss it. I do not want to give my client's information in the Committee. As far as the actual profit question is concerned, is there any way legislatively through the patent process to limit the profits? Secondly, will it come in the way of flow of technology in the field of drugs.

Shri R. Ramanathan Chettiar: That is not the only object with which this Bill has been drafted. We want the prices of life-saving drugs to be brought down to reasonable

levels so that they can reach the poor men of this country.

Mr. Robert Meagher: Price control is not and should not be the function of the patent law.

Shri R. Ramanathan Chettiar: We also want to curb the monopolistic tendencies of some companies.

Mr. Robert Meagher: You have made two points, prices and monopolies. I would suggest that the proper place to handle prices and handle monopolies is the price legislation and the monopoly legislation. You already have an Industrial (Development and Regulation) Act. A section of that Act says that if the Government feels that the distribution is unsatisfactory or the price level is high, it may step in and control distribution and prices. It is already there in your legislation. You do not need a patent Bill to do it. By this provision you are putting into the Patent Bill things which are not relevant to patent legislation. I am not arguing the philosophy of monopolies which I too do not happen to favour. But that is another question.

Shri R. Ramanathan Chettiar: You are a good public relations officer.

Mr. Chairman: Do you, as a lawyer, agree with the conclusions of the Kefavur Committee report?

Mr. Robert Meagher: There is a majority report and a minority report. Which one are you referring to?

Mr. Chairman: The majority report.

Mr. Robert Meagher: I do not agree with the majority report. I have to qualify that statement. The Kefavur Committee reports are based on a long series of hearings. They have said in the report that there

were certain problems and certain abuses. I think to some extent probably there are problems and there are abuses. The question is whether the Kefavur Committee report fairly reports the findings that took place before their own Committee. In a hearing that goes on for months, naturally people from both sides come and report. So, in the report you should at least mention what the other side have said. You may not agree with it, but at least you should state what they said. The reason why as a lawyer I object to the Kefavur Committee report is that I do not think enough consideration was taken of the view expressed by people who opposed what Kefavur was doing. As a lawyer I am interested in balancing the two options—the need for drugs and pharmaceuticals and the need for incentives for people to make inventions. These two should be constantly balanced.

I am not satisfied with the patent legislation as solving this problem. I am not sure that the whole patent approach is the right solution. If we go in for a Patent Bill, it seems to me that the patent Bill should adhere to the fundamentals of patent, namely, protection, monopoly if you want, for a fixed period of time so that you can create incentive for bringing out inventions.

The problem is how do you get these drugs, which are life-saving and important, to the broadest number of people at prices which are reasonable. One way may be to increase the Government Health Services, as the English have done. But when in a country so much of the budget is already devoted to health and development when not enough money is available with the Government for providing better health services, what should be done? That is the problem in your country.

Mr. Chairman: As you have put it, that is the problem. We have a huge population. We want medicines at cheap prices so that they can reach the common man. The foreign

patentees are importing only the intermediates and they have not started manufacturing drugs here; nor have they established any research institutions in the country. The main object of our Patent Bill is to promote research and develop industries. That has failed and that is why we want to amend the law and these are some of the amendments directly aimed in that direction.

Mr. Robert Meagher: I understand that and if I thought that what you were doing was going to achieve that, I would say, "Good".

Mr. Chairman: That can be seen only by the results.

Mr. Robert Meagher: That is my opinion and that is all I can offer.

Though I understand why it is being done, I must say that before I came to discuss this Bill, one of the main things that I could see was why at this time India wanted to introduce this legislation. My conclusion was, as I have stated to you, that it seemed to me that you were trying to solve the problem of prices and supply of drugs to a large number of people. I am not at all opposed to that goal. My question is whether by these amendments to the patent legislation you will be able to achieve this goal. I, unfortunately, feel that this will not do. The reason why it will not do is relatively simple. There is no legislative way in which any legislature in the world can force people in other countries to give them their technology and their money unless they give them in return what the people want. It is just difficult. I do not know the way to solve this problem. I appreciate the reasons for the effort but I just do not feel that this would be the way to do it. I can assure you that if I do find the way, I should be very glad to share my ideas again with you because, I think, we all hope to find some way so that poor people can at least have good health.

Mr. Chairman: That is our main object. You had the patent law in the USA for nearly 300 years but all the research has been done only recently, that is, in the last 20 years. Why did the patent law in USA not promote industry and research all these years?

Mr. Robert Meagher: The whole development of science in recent years has changed radically. We have made a number of fundamental breakthroughs in relation to science. Just as the quantum theory was developed, there was a sudden breakthrough in a number of fields in science and that has certainly got a cumulative effect. I am not an expert in the history of patent legislation to be able to suggest why in the past this technique has not paid, but one of the reasons is obvious. If I wanted to come to India 300 years ago from New York, it would have taken me months and months.

Shri R. Ramanathan Chettiar: 300 days.

Mr. Robert Meagher: Today if I want to come to India, I can probably be here in 24 hours and in the 1970s if I want to come to India, I will probably be able to come here within eight hours. The narrowing of the gap in the world between people has meant an exchange of ideas, technology and so on as a result of which there has been more development. For that reason, I think, patent is now getting outside of the national boundary and there is more advance.

Mr. Chairman: May be, it is an unpleasant question, but I would like to ask whether it is because you confiscated all the German patents as enemy property that so much of research and development took place in America.

Mr. Robert Meagher: I do not think the American research has been dependent upon German research. Although you will find that Japanese and German patents were worked as

a result of the war, however, it would be a bit unfair to suggest that. If we take pharmaceuticals, out of the 450 patents issued during the past 20 years, 370 have come from the United States.

Mr. Chairman: I find several of your leaders, like Jefferson and several High Court Judges, saying in the inquiry held in the USA that the patent law is mainly to promote research and industry particularly of the country where the law is passed.

Mr. Robert Meagher: I think, every country is interested in developing its own technology and economy first. When you have development then you export. The problem is only to get started. However, there is a trend in the world today which is much more international.

Mr. Chirman: Internationalism comes only when nationalism is satisfied.

Mr. Robert Meagher: That is true.

Mr. Chairman: Thank you very much.

Mr. Robert Meagher: May I just say once again that I want to thank you all for enabling me to come here. I consider it to be a great honour and pleasure to be able to come here. I hope, over the years as I keep coming back to India, we will have a chance to meet more often. Thank you very much.

Shri Sham Lal Saraf: May we reciprocate the same feelings.

(The witness then withdrew).

(The Committee then adjourned).

Minutes of evidence given before the Joint Committee on the Patents Bill,
1965

Friday, the 15th July, 1966 at 09.30 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman.*

MEMBERS

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2. Seth Achal Singh.
3. Shri Peter Alvares.
4. Shri Ramchandra Vithal Bade.
5. Shri Panna Lal Barupal.
6. Shri Dinen Bhattacharya.
7. Shri Bibhuti Mishra.
8. Shri P. C. Borooah.
9. Sardar Daljit Singh.
10. Shri Basanta Kumar Das.
11. Shri V. B. Gandhi.
12. Shri Kashi Ram Gupta.
13. Shri Madhavrao Laxmanrao Jadhav.
14. Shri Mathew Maniyangadan.
15. Shri Braj Behari Mehrotra.
16. Shri Bibudhendra Mishra.
17. Shrimati Sharda Mukerjee.
18. Shri Chhotubhai M. Patel.
19. Shri Naval Prabhakar.
20. Shri R. Ramanathan Chettiar.
21. Shri Sham Lal Saraf.
22. Shri A. T. Sarma.
23. Dr. C. B. Singh.
24. Dr. L. M. Singhvi.
25. Shri P. Venkatasubbaiah.
26. Shri Balkrishna Wasnik.

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28. Shri Vimalkumar M. Chordia.

29. Shri D. P. Karmarkar.
30. Shri P. K. Kumaran.
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32. Shri Dahyabhai V. Patel.
33. Shri Mulka Govinda Reddy.
34. Shri M. R. Shervani.
35. Dr. M. M. S. Siddhu.
36. Shri Dalpat Singh.
37. Shri R. P. Singh.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

DRAFTSMEN

1. Shri V. N. Bhatia, *Joint Secretary, Legislative Department, Ministry of Law.*
2. Shri R. V. S. Perisastri, *Deputy Draftsman, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Organisation of Pharmaceutical Producers of India, Bombay.

Spokesmen:

1. Dr. H. R. Nanji—*President.*
2. Mr. Keith C. Roy—*Vice-President.*
3. Shri A. V. Mody.
4. Mr. J. Reece.
5. Dr. S. L. Mukherjee.
6. Shri S. V. Divecha.
7. Shri J. N. Chaudhry.

II. Indian Chemical Manufacturers' Association, Bombay.

Spokesmen:

1. Shri J. H. Doshi, *Member, Executive Committee.*
 2. Shri P. D. Nargolwala.
 3. Dr. K. Subramanyam, *Secretary.*
-

I. Organisation of Pharmaceutical Producers of India, Bombay.

Spokesmen:

1. Dr. H. R. Nanji.
2. Shri Keith C. Roy.
3. Shri S. V. Divecha.
4. Shri J. Reece.
5. Shri A. V. Mody.
6. Dr. S. L. Mukherjee.
7. Shri J. N. Chaudhry.

Mr. Chairman: The evidence that you give is public. It will be printed and laid on the Table of the House. It will be circulated to all the Members of Parliament. Even if you want anything to be kept confidential, it will be printed and given to all Members.

We have received your Memorandum. It has been circulated to all the Members. If you want to make out any new point or stress any particular point, you may do so. Afterwards, the Members will ask questions and you may answer them.

Dr. H. R. Nanji: Mr. Chairman and the Members of the Committee: I take it as my very pleasant duty to thank you on behalf of the Organisation of Pharmaceutical Producers of India and my colleagues present with me here for giving us a welcome opportunity of submitting oral evidence before this truly representative Select Committee, which comprises of a select group of Members from Lok Sabha and Rajya Sabha. The manner in which this august Committee has been prepared to take evidence from all individuals and organisations, Indian and foreign, who have some knowledge to shed on the subject of patent system has been most exhilarating and satisfying. We know that this is not usual with the Select Committee. It is a great tribute to your open-mindedness and to the catholicity of the parliamentary system.

My colleagues and I are before you with a reckonable status on behalf of

the Indian Pharmaceutical Industry. The Organisation we represent includes as members most of the important pharmaceutical manufacturers in India. In terms of manufacturing capacity, it represents more than 70 per cent and in terms of exports, more than 90 per cent. It embraces public sector as well as private sector companies including purely indigenous manufacturing units.

The Patents Bill contains some clauses which may be said to be discriminatory against the drugs industry and, therefore, is of vital importance to our members. The subject-matter covered in the Bill is so comprehensive and so highly technical that it is difficult for one person only to study all the aspects and be in a position to answer satisfactorily your questions. With your permission, therefore, I have taken the liberty of bringing with me some of my colleagues. I have pleasure to introduce them.

Mr. Keith C. Roy is the Vice-President of this Organisation and the Managing Director of Merck Sharp & Dohme of India Ltd. He joined the Indian Civil Service in 1935 and retired in the year 1952. He has represented India at various international conferences including the Colombo Plan Conference, Paris Peace Conference and meetings of the World Bank.

Mr. S. V. Divecha is the Secretary and the Legal Adviser of Hoechst Pharmaceuticals Ltd. He practised as a Solicitor in Bombay for 9 years and in the last over 6 years has been attending to patents and trade mark matters on behalf of this firm.

Mr. Chaudhry is the Executive Director of the Organisation. He worked with the Government of India from 1947 to 1960 in the Ministries of Communications and External Affairs. He represented India in the war torn Vietnam from 1960 to 1965 based at Hanoi. For sometime he was the Parliamentary Assistant attached with the late Prime Minister, Pandit Jawaharlal Nehru.

Mr. J. Reece is a Director of Glaxo Laboratories India Private Ltd., a Fellow of the Pharmaceutical Society of Great Britain and he has first-hand experience in pricing and sales.

Mr. Mody is the Chairman of the Development Council for Drugs and Pharmaceuticals, Government of India and the Chairman and the Managing Director of the Unichen Laboratories Ltd. He has considerable experience of researches done in National Laboratories.

Dr. S. L. Mukherjee is the Director-in-charge of Research in Sarabhai Chemicals Ltd. and has numerous patents to his credit.

Lastly, I am the President of the Organisation. My primary interest is in quality control being the Managing Director of the firm of Public Analysts and Consulting Chemists Italab Private Ltd. Besides, I am a Technical Director of Pharmed Private Ltd. and Wander Pharmed Private Ltd., both pharmaceutical firms. I have had the opportunity of studying the complete cross-section of the Indian pharmaceutical industry during the last 12 years, first as a member of the Pharmaceutical Enquiry Committee and later as Chairman of the Development Council of Drugs and Pharmaceuticals. Also I was a member of the Pharmaceutical Delegation to Russia in 1956 and Leader of another Pharmaceutical Delegation in 1963 to the United States of America, the United Kingdom, Germany, Switzerland and Japan. Our members were extremely happy to show round the plants to the distinguished members of this Committee in Bombay, Baroda, Poona, Calcutta, etc. It is my firm belief that these visits have been mutually beneficial: from your point of view to know the present status of the pharmaceutical industry and the future programme we have before us; and from our point of view to know the main points which are exercising your minds on the subject under consideration.

Today perhaps we are in a better position to discuss this subject in its

proper perspective. With your permission I propose to give a brief expose highlighting some of the essential comments in our memoranda, explaining and elaborating wherever necessary.

An important feature of this expose is that we have suggested precise amendments to some of the vital clauses in the Bill. These amendments have already been circulated to the members. We will then be ready to answer the questions which the members may ask. For the reason I have stated, the question will be answered either by myself or by one of my colleagues who has made a special study in the relevant subject.

We have submitted to the Committee two memoranda: the first deals very briefly with our comments and suggestions on different clauses of the Bill; and the second, the supplementary memorandum, comprises a large mass of facts and data which are relevant to the subject.

Our principal motivation in submitting our views before the Committee are first to share only the true facts and secondly to be guided by what we wish to call the national and enduring interests of this country.

We have every reason to be proud of the record of the pharmaceutical industry in the period which has elapsed after Independence. Unlike many other industries, the pharmaceutical industry has met every Plan target. In the fields of production, import substitution and exports, we have done very well indeed. All this is lucidly brought out in the booklet called Indian Pharmaceutical Industry, 1965. This booklet has already been circulated to the members.

Some hon. Members: We have not received it.

Dr. H. R. Nanji: We shall arrange to circulate it.

This booklet has been compiled and published on behalf of the Director

General of Technical Development, Government of India. It is an official publication and whatever is stated therein is based on facts.

For the benefit of the members we have prepared four charts. These charts have also been circulated to the members. The first chart shows the production value in rupees of pharmaceuticals from 1948 to 1965; this chart shows clearly how the production has risen from a mere Rs. 12 crores in 1948 to the expected target of Rs. 175 crores at the end of the Third Plan. The second chart shows the production of basic drugs in India in 1964; this chart shows the value of production of the major items of basic drugs such as antibiotics, sulpha drugs, anti-T.B. drugs, anti-dysentery drugs and so on.

Shri R. P. Sinha: Both private and public sector?

Dr. H. R. Nanji: Yes; both are included.

The third chart shows exports during 1958—65. The fourth chart shows the saving in foreign exchange and this is a measure of import substitution.

Shri Kashi Ram Gupta: I have not been given the charts.

Mr. Chairman: They have been circulated.

Dr. H. R. Nanji: Reference may also be made to Chapter 1 of the Supplementary Memorandum, which outlines also the economic contribution the industry has made to the nation. We wish to submit that the phenomenal growth of the pharmaceutical industry in this country has been largely due to the patent system which has been in vogue so far. This system for developed and developing countries has come to occupy a unique importance to both. In other words, it has to be recognised that the law relating to patents has to be reviewed in the international context in relation to capital investment,

know-how and advancements made in research. . . .

Shri R. Ramanathan Chettiar: Without sacrificing the national interest.

Dr. H. R. Nanji: It can never be approached or dealt with in isolation.

In the second Chapter of the Supplementary Memorandum, the role of patents in the transfer of technology to India has been dealt with exhaustively. We have illustrated what phenomenal progress the pharmaceutical industry has made in the last decade owing to adequate patent protection and have highlighted the adverse effects which must follow the weakening of patent protection not only on the transfer of technology from abroad but also on investment, research and export. No doubt, it is the sovereign right of every government to devise legislation most suited to that country or in the best form of enlightened self-interest. In fact, the kingpin of our argument is that we should stand guided by enlightened self-interest. Our Prime Minister said recently that nations have become increasingly inter-dependent in the modern age and our efforts should be to work together. The time has long past when we could afford to live as frogs in the well. The highest calling of the scientist is the development of knowledge in the service of mankind.

We are convinced that fruits of advancement in the pharmaceutical field, wherever made, should be available and acceptable to all people and our people are no exception. It is very relevant to examine the progress made by a number of countries under the patent system. The first country which we, as Asians, would like to consider is Japan. Before I state some facts about that country, I wish to correct a totally incorrect statement that has been recently made, namely, that Japan has progressed as they had no patent regulation prior to the War. That country has had

Patent Law going as far back as 1885, became a Member of the Paris Union in 1889 and the present strong Patent Law had its origin in 1921. The latest amendments in 1959 only serve to make the patent protection even stronger. A country completely impoverished in defeat, industrially ruined and politically shaken has risen in economic heights never known before. In the pharmaceutical industry, it is to-day second only to the U.S.A. with a production figure of Rs. 550 crores in 1964 for a population of 90 millions as compared with about Rs. 140 crores in 1965 in India for a population of 450 millions. In standards, it compares with the most advanced countries of the world and its products are imported by the U.S., Germany, France, U.K. and many Far Eastern countries. Out of the total pharmaceutical exports of Rs. 23.71 crores in 1964, the value of exports to the U.S. alone was Rs. 3.6 crores more than our total exports in pharmaceuticals. Its research expenditure on pharmaceuticals only in the year 1964 was Rs. 17.9 crores.

We are very sensitive in regard to royalty payments for technical know-how. In the year 1964, Japan made the royalty payments to the tune of Rs. 69 crores. She earned only Rs. 3.5 crores as patent royalty which means that the net minimum payments amounted to Rs. 65.5 crores. I make bold to say without any fear of contradiction that this remarkable achievement of Japan is due to three factors:

- (1) Strong patent legislation safeguarding the essential interests of the inventor;
- (2) Very free acceptance of foreign know-how from almost every advanced country in the world; and
- (3) Payment of adequate royalties to the patentees.

You have heard the evidence of the Japanese Delegation. They are convinced that the cross-flow of technical know-how and cross fertilisation

of know-how in international commerce is possible only under a complete protection of Patent Law. We have given in Chapter 8 (in our supplementary memorandum) a more detailed study on Japan. The evidence tendered by the distinguished Japanese Delegations must have given a very clear picture of this spectacular progress in pharmaceuticals in Japan and how this has been achieved. This classic example is well worthy a close study and emulation by our country.

Germany's example is not different from Japan in terms of the impoverished state it found itself in after World War II.

The example of Italy has been frequently misquoted in recent years. It has been stated that Italy has a flourishing pharmaceutical industry because there has been no Patent protection for drugs in the last two decades. It has also been stated that for the same reason the prices of drugs in Italy are the least. Both these statements are probably wrong. For the benefit of Members, we have included a Chapter on the Italian Pharmaceutical Industry in our Supplementary Memorandum Chapter 7.

In this regard, Members have had the benefit of the oral evidence of a very eminent Italian, Professor Bergami. I am certain he must have cleared many of the misconceptions alleged to be associated with the existence of a non-patent system in Italy in the field of pharmaceuticals.

Europe, Japan and America belong to one school of thought on the patent system. There is however a delightful identity in this field between this group and East Europe. The United Soviet Republic, Czechoslovakia, Yugoslavia and other East European countries all adhere to a strong patent system and are members of the Paris Union. The essential requisites for becoming a member of the Paris Union is to have a national patent legislation which gives adequate pro-

tection to the inventor and does not erode his rights. It is not so long ago that Russia has joined the community of nations for the exchange of information and know-how in science and technology and as a result, it has taken up membership of the oldest international institution on patents, the Paris Union.

Shri Peter Alvares: May I ask one question? It would be better if he goes to other aspects instead of reading the whole thing.

Shri Sham Lal Saraf: Let him have his full say.

Mr. Chairman: You can continue.

Dr. H. R. Nanji: The significance of this development is only too obvious. It certainly means that on at least one subject of international importance, East and West meet on one platform and conform to certain identical standards which should form a basis for ourselves. In the sixth Chapter of our supplementary memorandum, we have given a resume of the Patent Laws in some of the important countries in the world covering essential aspects only of such laws in respect of period of validity of patent, patentable subject matters, compulsory licences and licences of right, Government use of patents and expropriation. In the 9th Chapter, the factual data on a number of important subjects relevant to the Bill have been given. Some of these have been compiled for the first time in India and shall replace the erroneous conjectures and statements made from time to time. Other explanations apart, this organisation and the delegation appearing on its behalf have for very good reasons, drawn heavily on the report of Justice Rajagopala Iyengar. You will agree that he took three years in completing this report. He is highly respected and an eminent judge of the Supreme Court and made a thorough, intelligent and detailed study of the subject. He deserves by and large acceptance and respect from all of us. Since the

time he submitted his report and now, the economic developments in the world, more so in our country, point to one conclusion only that the Patent system is the greatest instrument to stimulate industrial research, and through it ever-growing industrial progress and growth. Countries are the warp threads and international economic co-operation in science and technology are the weft threads of the fabric of peace. The more the wefts the stronger the peace.

Sooner than later India has to join the Paris Union so as to belong to the progressive group of countries on whose support and co-operation this Union thrives. A Model Law for developing countries on inventions has been drafted by a Committee of Experts under the auspices of the United International Bureau for the Protection of Intellectual Property. This is known as BIRPI. It was composed of 22 countries including India out of a total of 69 countries which consider themselves as developing countries. In formulating our views we have drawn on this report, again for good reasons. Conformity with the recommendations of this report will make it easier for us to gain membership of the Paris Union.

Shri R. Ramanathan Chettiar: May I draw the attention of the witness to Justice Rajagopala Ayyangar's report on patent legislation where it is mentioned that USA virtually confiscated all German patents during the Second World War.

Dr. H. R. Nanji: Before I venture to explain this Organisation's views on the important clauses of the Bill, I wish to state that we only desire to contribute our views in the hope that the Bill as finally drafted will be wholesome, practical and helpful to the growth of the pharmaceutical industry of India which is so vital for the good health of the nation.

I will now come to the consideration of a few of the important clauses to which reference has been made in our memorandum.

First is Cl. 2(h)—page 12 of the memorandum. Let me first draw the attention of the Committee to our comments on the definition of 'Government Undertaking'. Under clauses 99 and 100 I wish to discuss why 'public sector undertaking' and 'any other undertaking' should not be included in the definition of 'Government Undertaking'. To the best of our knowledge no country in the world includes Universities, research institutions or other scientific or technical institutions in such a definition for the simple reason that this is tantamount to withdrawal of the effective value of patent protection over a wide field. Mr. Justice Ayyangar also expresses the very same view. We do accept that Universities and research and other institutions need the use of patented invention for the purposes merely of experimenting or doing research including the imparting of instructions to pupils. These needs have been provided for adequately in Cl. 48(d) of the Bill. The amendment we have suggested has been placed on the Table and in respect of this clause 2(h) we have recommended that sub-clause (ii) and sub-clause (iii) be deleted together with the following words from clause 2(h) 'Council of Scientific and Industrial Research..... major part of the Government.'

Now, on clause (5) the Minister for Industry in introducing the Bill in the Lok Sabha has made some forceful remarks regarding process/product patents. I, therefore, wish to take a little of your time to explain the stand taken by this Organisation OPPI.

For the first time the Indian patent law makes a distinction between different clauses of inventions in regard to the type of protection and this clause restricts the claim to the processes only in the case of foods, drugs and substances prepared by chemical processes. There is not the least doubt that there is an increasing trend in the world both in developing and developed countries to grant product protection *per se* in

respect of inventions for drugs and medicines. The reasons are obvious. A very large majority of inventions in the field of drugs and medicines are produced by synthesis and the process of manufacture generally does not involve any novel principle. Nor does it constitute a significant part of the research work leading to the discovery of a new medicine. It is the far more exhaustive testing itself—bacteriological, pharmacological and clinical—of thousands of compounds out of which one may finally emerge as the useful drug that represents the justification for patent protection. With little research effort one can work out in many cases an alternative process and thereby circumvent the process patent of the original inventor. It works, therefore, unfairly to the disadvantage of the first inventor. However, there are some scientists and technologists who held the view that in the present stage of development of science and technology in this country product protection may run counter to the interests of indigenous research and technology. Therefore, we suggest that, for the present, in that field of articles of food, medicines and drugs the protection be extended to the process of manufacture and to the products produced by such process.

However, the main difficulty in accepting process patents is the necessity for the patentee to provide burden of proof in case of alleged infringement. This is difficult and well nigh impossible especially when the drug or medicine is imported from abroad to prove that the infringer has used the process claimed in the patent specification. It is usually necessary to gain access to his plant which neither the patentee nor probably the Court can enforce. This difficulty has been clearly recognised in the BIRPI report. To overcome this difficulty the BIRPI report has made a provision under Sec. 51 that in respect of process patent the product is presumed to be made by the patented process unless proved to the contrary. That is, the burden of proof

should lie on the alleged infringer. All industrialised countries having only process protection, for example, Japan, Germany Switzerland, etc. and even the East European countries such as Poland and Yugoslavia have provision to this effect in their respective patent laws.

This organization very strongly urges that the Indian patent law should also contain a similar provision to protect the inventor. The exact wording of the clause is given in the suggested amendment.

Clause 47: In some knowledgeable circles a view has been expressed that the process protection granted under clauses 5 and 47 of the Bill may not be effective to cover the importation of the product made by the particular process patented in India. According to a UK decision where the patent is not for an article but is only for a process, the protection covers not merely the patented process but also extends to the articles when made by the use of the process whether such use is within the country or abroad so that importation or sale of an article made abroad by the patented process would be an infringement of the process patent. Justice Ayyangar in his report on the revision of patent law has recommended the adoption of the Rule followed by U.K.

The Bill does not specifically state that importation into India of a product made abroad by a process patented in India will amount to an infringement of the patent. It is submitted that in order to set at rest any future controversy, Section 47 should be suitably amended to secure that the importation of a product made abroad by a process patented in India will be deemed to be an infringement of the patent.

Coming to clause 48, this is from our point of view, a very important clause. This clause takes out from the sphere of infringement of patent

rights a wide variety of operations if they are done by or on behalf of the Government. It permits the Government to use a patented invention or to import a product covered by a patent without any compensation to the patentee. The exercise of Government's rights under this clause is not subject to judicial assessment by an independent tribunal. Let us briefly examine the detailed implications. Firstly, if this clause were enacted, the provisions are cast in such wide terms as to confer on the Government which is a major consumer of many products, almost unlimited powers to infringe patent rights.

Secondly, this clause goes counter to the very basic idea and philosophy for the grant of patents given in clause 83 which states that patents are granted to encourage inventions and to secure that they are worked in India on a commercial scale and to the fullest extent. It does not need much imagination to see that if clause 48 were enacted it would encourage the import of pirated goods under circumstances of grossly injurious and unfair competition to the home industry. Moreover, it would subject indigenous industry to loss of patent protection over a wide field.

Thirdly, the constitutional propriety of a clause which permits the Government the use of patents which are a species of intangible property, without payment of reasonable compensation and without due process of law, needs careful examination. We concede that it is the duty of Government to ensure that the laws of the country pay due regard to the national economy. The rights of Government to import a patented product or to make use of patented invention are amply provided for in clauses 99, 100 and 102. Under these clauses, Government has the right to import a patented article and use a patented invention. But the fundamental difference between these clauses and clause 48 is that the exercise of Government's

rights is subject to payment of compensation and in default of an agreement, compensation has to be determined by a reference to the High Court under clause 103.

I shall have something more to say on these two clauses a little later. The relative provisions of this clause 48 do not find a parallel in the patent laws of any country in the world. We strongly urge the deletion of clause 48, particularly as there are adequate provisions in the Bill for use of an invention by the Government for certain specified purposes.

We then come to clause 53. Here again for the first time in India, this clause discriminates in the term of a patent in respect of inventions of drugs and medicines. Not only has the period of validity been reduced to 10 years for new patents, but the term of all existing patents relating to drugs and medicines has also been reduced to 10 years. Lastly, the provision for extension of a patent in the existing patent law has not been included in the Bill. In the memorandum we have made detailed comments on this clause. We have reviewed the position in other countries of the world and have laid stress on the likely adverse effects if this clause is enacted in its present form.

Apart from anything else, this Committee must consider what damage this clause will inflict upon Indian patentees. Our own scientists are beginning to produce results, some of which are patentable. If we are to put limitations on the period of validity our own scientists will suffer. Sir, it has to be emphasised that the time-lag between the date of application for a patent and the manufacture of a patented article in India is extremely long for items covered by the drug industry due to a number of additional steps which are necessary under the Drugs Act and under the Industries Development and Regulations Act. It is not impossible that in many cases a patent will be almost due for expiry

before completing the procedures that are necessary before commercial manufacture of a new drug is possible. Therefore, if the time is reduced to 10 years, it would in effect, in some cases be as good as abrogation of patents in the field of drugs and medicines. There is hardly any country in the world which provides for a term of 10 years in respect of patents for drugs and medicines without making adequate provision for the extension of the term. We recommend that the provision in the existing Act for extension of the term of the patent when Government are satisfied that the patent has not been sufficiently remunerative, be retained in the Bill.

As regards patents granted under the existing Act, there can be no doubt that by reducing the term to 10 years, a patentee is deprived of his rights in the patent vested in him by the old Act. This deprivation would surely raise legal issues and needs careful examination.

In the amendment to this clause which we have proposed, we have recommended 14 years from the date of the patent. But if this is unacceptable, we have suggested as an alternative—but only as a rather poor alternative—a term of 10 years from the date of sealing of the patent.

Next clauses 87 and 88. These two clauses are among the most important in the Bill and a correct reappraisal by the Joint Committee of the deep issues involved will go a long way towards sustaining the healthy development of the drugs and chemicals industries and ensure a proper climate for research and investment in India. Clause 88 compels the Controller to grant a licence without taking into consideration the basic minimum requirements and ensure a proper climate for applicant for a compulsory licence under clause 84 as specified in clause 85. The order of the Controller fixing the terms on which the licence shall be

granted is not governed by the provisions of clause 92 pertaining to the procedure for dealing with applications for compulsory licences. The applications made under clause 88 can be summarily disposed of by the Controller. No appeal has been provided for. It has been our firm belief that the automatic endorsement of patents relating to drugs with the word "licence of right" and the resulting automatic grant of licence by the Controller to any applicant, will result in chaos and will have profound effects in a number of directions which have been narrated in the memorandum on pages 52 and 53. There is not the least doubt that these provisions will hamper industrial progress and restrict research and inventive innovation in the country in the field of drugs and chemicals. The ceiling of 4 per cent royalty and other remuneration in the field of drugs and medicines is another discriminatory provision and will impede the smooth flow of know-how. There is also no substance in the argument that the costs of drugs are high, because royalty payments are exorbitant. All royalty payments are strictly regulated by the Government and their incidence on the cost of drugs has been shown to be negligible. Justice Ayyangar in his Report after having considered the patent systems of various countries came to the conclusion that it is not feasible to arrive at a uniform rate of royalty which would be reasonable for licences in respect of each and every invention and he recommended that it is not desirable to fix statutorily the maximum rate of allowable royalty. The Model Law for developing countries prepared by BIRPI stipulates that a compulsory licence shall only be granted subject to the payment of adequate royalties commensurate with the extent to which the invention is worked. In Italy, the Patent Law which will shortly be introduced lays down that the payment of royalty shall be fair in relation to the importance of the invention, its expected economic return, the duration of the licence and every other factor relevant to its use.

We fully subscribe to the stipulations in that Patent Law. The industry is aware of the reasons why applications for compulsory licences under section 23(CC) of the existing Act are very few in number and that such applications have been finally adjudicated upon only after considerable delay, expense and inconvenience both to the applicant as well as the patentee. We desire to make some concrete and specific recommendations to improve the present compulsory licensing procedure and we do respectfully submit that this clause 87(I) in regard to 'Licence of Right' is totally unnecessary, as all our legitimate objects will be positively met without difficulty if our suggestions are accepted. Automatic licensing will bring about a situation similar to that in Italy which the Italian Government are now trying to put right. Our specific recommendations are—We concede that Government should designate certain vital areas such as drugs and medicine in which compulsory licence could be made available at any time i.e., even before the waiting period of 3 years. We do not, however, agree that compulsory licences should be granted for inventions relating to drugs and medicines by the Controller automatically, Licence of Right without taking into consideration the basic minimum requirements to be fulfilled under clause 84 as specified in clause 85.

There should be no ceiling on royalty and we recommend to the Committee adoption of the principle in the Italian draft Patent Law, namely, that royalty should be fair in relation to the importance of the invention, its expected economic return, the duration of the licence and every other factor relevant to its use.

We recommend that the Controller should be directed to decide applications for compulsory licence in the field of drugs or medicines as well as in other fields within a specified time of 3

months and that the application of clause 84 should be modified to this extent. We also recommend that the Controller may permit the applicant to work the invention pending a final decision on the terms if he is satisfied that the conditions specified in clause 85 have been adequately met. And finally, we recommend that an appeal against the decision of the Controller as to the grant of a compulsory licence and the terms of such licence including the payment of royalty should lie to a judicial tribunal which should in its turn decide the appeal within a specified time, say, of three months. The amendments incorporating these recommendations are before you.

Clause 95: Sub-clause (3) of clause 95 of the Bill empowers the Government to authorise any licence to import the patented article from abroad on terms and conditions which are not specifically laid down. This clause does not provide for payment of any royalty or compensation to the patentee. No appeal has been provided for against any action taken under this sub-clause. We submit that provisions of this sub-clause (3) are contrary to the general principles applicable to the working of patented inventions as set out in clauses 83, 94 and 95(2) of the Bill. The Patent system in general and the compulsory licensing provisions in particular aim at promoting the working of the patented process within the country and importation will certainly be not in conformity with this aim of encouraging indigenous industry. We respectfully submit that clause 95(3) is illogical in the context of clauses 84 and 85 in that having granted a compulsory licence for the purpose of working the invention in India, clause 95(3) suddenly permit the Government to do the very opposite namely to import. This clause puts in reverse the object of clause 84, namely, encourage the production of the invention in India. Moreover, Government had adequate powers to import a patented product for the purpose of

the Government, under Chapter VII of the Bill. Therefore, sub-clause (3) of clause 95 is entirely unnecessary and should be deleted.

Clauses 99, 100 and 102: Chapter XVII deals with the use of inventions for the purposes of Government and acquisition of invention by the Central Government. These clause empower the Government by mere notification to authorise not only Government Departments but also Government undertakings and any other undertaking in the private sector to make use of the patented invention for the purpose of Government having regard to the interests of the general public. The use has to be on agreed terms or as determined by the High Court, in default of agreement. Secondly, it permits Government to acquire the invention outright for Government use. These clauses place no limitation whatsoever on the industries that may be included or in the specific circumstances under which the powers can be exercised and give the Government indefinite general power to give firms patent rights to which they have otherwise no entitlement. These clauses, therefore, lead to a serious erosion of patent rights.

We do concede the right of the Government in certain specific circumstances to use an invention for the purpose of the Government. But such use should only be for the purpose of the Central Government or a State Government or a Government undertaking as defined in this memorandum. There is no justification to extend such use to a Corporation, public sector undertaking, established by a Central or State Act because these public sector undertakings are indeed commercial concerns and it is only appropriate that they should apply for compulsory licences just as any private sector undertaking is required to do. There is no justification or there is even less justification to extend use of inventions to any other undertaking in which the Government has no interest at all.

Secondly, it is imperative that the vital areas in which the use of an invention for the purposes of Government may be permitted should be clearly defined. We have accordingly recommended that such use by Government should be restricted to certain specific purposes such as to meet the needs of national defence, national economy or public health (epidemics).

Thirdly, it is our submission that the powers of the Central Government under clause 100 should not be exercised before granting the patentee an opportunity of being heard.

Finally, clause 102 pertaining to the acquisition of an invention by the Central Government should be deleted as there are no legitimate reasons for such a complete appropriation of industrial property rights. In any case, the acquisition of an invention must be restricted to certain specific public purposes, such as the defence, the emergency or an epidemic. The suggested amendments giving effect to the above submissions are before you.

Clause 116.—This clause deals with appeals. We submit that the denial of a judicial review from the orders of the Controller or the Central Government is an unwarranted departure from basic principles. Industrial property rights are the same as any property and if they are to be expropriated, a citizen must have the right of adjudication on his compensation by a completely independent tribunal not subject to administrative control. If the Indian Constitution is to preserve democracy, there can be no appeal from *Caesar* to *Caesar*. In the memorandum we have reviewed the position in some other countries and have made a pointed reference to Justice Ayyangar's comments and the recommendations in the Model Patent Law prepared by BIRPL. This organisation has made the following concrete recommendations regarding appeals keeping fully in mind the necessity of obviating delays.

(1) An appeal against the decision of the Controller as to the grant of compulsory licence should lie to the Appeal Tribunal.

(2) Where no appeal is provided against the decision of the Controller or Government or where an appeal is provided to the Central Government, the orders or directions of the Controller or Central Government, as the case may be, should be appellable to a statutory judicial tribunal constituted on the lines of the Income-tax Tribunal or the Sales Tax Tribunal. In short, we ask for a tribunal not subject to administrative control.

We have suggested the amendments which are necessary in clause 116 and they are before you.

Clause 158.—The High Court and Appeal Tribunal may make rules consistent with this Act as to the conduct and procedure in respect of proceedings before them under this Act. My colleague, Mr. Divecha, will be pleased to answer any question on this clause or indeed on the legal aspects of any other clause.

I have dealt today only with clauses which we consider of very great importance. There are a number of other clauses, for instance, clauses 2(g), 2(b), 3(d), 25, 64, 89, 96, 102, 103, 112 and 162 on which this Organisation have made some submissions, but I do not wish to repeat them.

I have taken some time in presenting our views on various clauses of the Bill. We have tried to justice to the principles underlying the patent system. There are two or three certain other general aspects on which some explanation is due. I wish to say a few words on prices, investment, profitability, dividend and research.

We know that the question of drug prices is agitating the members of this Committee. Also some associations and companies, institutions and individuals have drawn attention to this question. Before I proceed to deal with some salient facts about

drug prices me make one pertinent observation regarding those who have expressed views, and at times vehement views, against patents.

One knows that there is one factor which is common to all these. Every one of them have had against them proceedings for infringement of patent. Some of these proceedings still await the decision of the Court. Therefore, the opposition to patent is due, if I may suggest, more to their self-interest. I make this statement with the full knowledge of the facts.

It is pertinent to point out, as shown in the chart of wholesale price index, which was circulated yesterday, that while prices of all commodities have been going up considerably for the last many years, drugs and medicines are among the few items where prices have either declined or held successfully at steady level. In the supplementary memorandum, we have dealt with the question of drug prices in considerable detail, particularly in relation to patents and have drawn pointed attention to some of the glaring fallacies. I should like to touch briefly upon some of the conclusions in this Chapter and make a few pertinent observations.

First, we have shown conclusively that patents as such are only one of the contributory factors to the price of drugs. There are many other much more significant factors which contribute to the price of drugs. We have given an effective answer to the oft-repeated allegation that "patents result in high prices" by (a) comparing the indigenous price and the c.i.f. cost of 15 essential non-patented drugs, and (b) by comparing prices of several important drugs in Italy (where there is no patent protection for drugs) with those in other countries such as Britain, Germany, U.S.A., Japan, etc.

The price of a manufactured item is dependent upon the cost of raw materials and the cost of production. There are innumerable factors which

have relevance, and over which the industry has no control. If devaluation has proved anything, it is this that the cost of production in this country, because of various factors, is far higher than in other developed countries.

It has been persistently stated by persons who have no knowledge of the position that the cost of the basic ingredients which contain the therapeutic value in a tablet or a capsule or an ampoule is an infinitesimally small portion of the price charged to the consumer. Such comparisons are completely fallacious. It is like comparing the cost of the raw cotton that goes into a man's shirt, or the value of the wheat, flour and sugar that goes into a packet of biscuits, or the value of the raw tobacco which goes into a pack of 10 cigarettes. The weakness and bias of such arithmetic is obvious. Moreover this difference in the price of the ingredients and of finished product to the consumer is by no means restricted to patented drugs. Take the example of Penicillin vials produced by Hindustan Antibiotics. The cost of ingredients of a vial is 4 P. and the price to the consumer is 42 paise.

Secondly, we have shown clearly that the oft-repeated quotation from the Kefauver Report that "drug prices in India are uniformly higher than in other countries" is not true. To prove this, we have collected the domestic prices to the Public in West Germany, United States, Italy, U.K., Japan and India and for those drugs specifically referred to in the Kefauver report. This table has been placed on the Table this morning. I should like to apologize for the delay in submitting this table.

Shri K. V. Venkatachalam: It has not been circulated.

Dr. H. R. Nanji: We gave it this morning.

Shri R. P. Sinha: We want to have copies of charts distributed this morning.

Dr. H. R. Nanji: Charts were circulated yesterday. This Table which has been circulated shows two things quite clearly. The first is that the prices of drugs in India are not uniformly high as alleged in the Kefauver Report, and secondly, the price of drugs in Italy is not uniformly low because of lack of patent protection. Take for example, Tetracycline Caps. 16 x 250 mg. Price in Germany for Aureomycine is Rs. 30.76, for Terramycin 25.11; in the United States, it is Rs. 20.70 and Rs. 23.36; in India it is Rs. 17.71 and Rs. 17.44. Similarly, take Chloramphenicol Price in Germany is Rs. 30.34; in the United States it is Rs. 18.43 for 100 mg., not for 250 mg; in Italy Rs. 9.98; in U.K. Rs. 12.44; in India Rs. 12.00. Take Librium. Price in Germany is Rs. 5.41, in U.S.A. Rs. 22.39; in Italy Rs. 4.76, in U.K. Rs. 6.03, in Japan Rs. 4.46 and in India Rs. 4.40. And like this we go on to the various other items which include Prednisolone, Procaine Penicillin inj., Penicillin Sodium inj., PAS Tabs, etc. etc.

It is to be noted that these are pre-devaluation comparisons. One immediate effect of devaluation is to alter all the price relationships given in the Memoranda and during this oral evidence. Calculated at devalued rates prices of drugs in India become the lowest in the world.

It has clearly been shown that the domestic prices of different drugs in different countries vary considerably. It is imperative to note, as stated in the Supplementary Memorandum, that the domestic prices of pharmaceuticals in different countries cannot be properly compared without a detailed interpretation of many factors such as duties and levies, taxes, cost of raw-materials and labour, commissions and discounts to wholesalers; the transfer of knowhow; the licensing position, participation in the cost of the basic drug research, etc. In this context of this Bill it is that any attempt to relate prices in one country with those in another is not by itself meaningful. All the comparisons made during the pre-

devaluation period are now proved to be based on artificially high value of the rupee. Particularly, we have drawn attention to the basic fallacy of using as a basis the so-called international prices of drugs for comparison with Indian prices. There are, in fact, no such international prices. Generally, prices which have been quoted by countries like Italy and certain other East European countries are referred to as international prices. There is no doubt that such prices are generally dumping prices and these can readily be proved by examining the domestic prices of the same drugs in these countries. Members are, no doubt, aware that many countries including India for a variety of reasons export several commodities at dumping prices.

Broadly, we have dealt at some length on the usual practice of critics selecting one or two drugs that a particular company manufactured in India and seeking to make price comparison with so-called international prices which are claimed to be very much lower. Reference is frequently made to Taracyclin, chloramphenicol, librium, vitamin B¹², vitamin B⁶, tolbutamide, etc. We have submitted cogent arguments in the Supplementary Memorandum why such comparisons are erroneous and conclusions drawn from them invalid. It is also fallacious to pick out one or two drugs of a company for examination of prices. A well meaning critic should examine the total profitability of a company. If this is done a very different picture emerges.

Finally, we submit that the questions of prices and profits have to be examined independently. Specific suggestions have been made in regard to the steps that might be considered should Government come to the conclusion that the prices of some drugs in India require examination. The Government of India have adequate powers under existing legislation to control the prices of any commodity including drugs and pharmaceuticals.

All that we ask is that instead of indiscriminate condemnation of the industry as a whole proper steps should be taken to get the cost structure investigated by a statutory body such as the Tariff Commission if Government considers it necessary. Government can rest assured that this Organisation will cooperate fully in this matter.

Some people have the feeling that profitability in the pharmaceutical industry in this country is very high indeed or more than reasonable. I hope I can speak on the ground that hon. Members here do not abhor profitability as such. However, the Prime Minister said the other day in her address to the senior executives from the Public Sector Undertakings that unless the Rs. 2000 crores investment in the public sector brings to the Government offers reasonable profits the whole base of creating this sector would be considered futile. The concensus of opinion at this meeting in respect of profit was that it should be accepted as a test of efficiency and this is distinct from profiteering. More important than this the meeting seemed to accept the principle of a 20 per cent profit return on equity plus reserves. The whole sense of the Conference was that our industrial units should pass the tests of profitability, service and growth. My colleague, Mr. Reece, will be pleased to answer any questions on prices.

In the third chapter of the Supplementary Memorandum a resume has been given on investment, turn-over, profitability, dividends, etc. in the pharmaceutical industry in India. Some statements have appeared in the Reserve Bank bulletin on investment, profitability, etc. and we have drawn pointed attention to one basic fallacy in these statements on the definition of capital employed. We have discussed this matter with a very senior officer of the Reserve Bank and he agreed that capital employed must include all moneys used in a business including reserves and even

including long-term loans and not the paid-up capital only. A different picture of the pharmaceutical industry in respect of profits, dividends, royalty, etc. emerges if the correct figures of the capital employed are taken. I should like to draw the attention of the Members of the Committee to the figures of dividends as percentage of net worth published in the Reserve Bank bulletin for November 1965 for several industries. These figures show clearly that dividends in the pharmaceutical industry are certainly not high. May I also draw the attention of your Committee to the findings of an independent survey of the pharmaceutical industry conducted by a firm of reputed Chartered Accountants on behalf of OPPI. Full details of this survey which is considered statistically significant are given in chapter 3 of the Supplementary Memorandum. I wish just to refer in brief to some of the important points. The net profit after provision for taxation and development rebate reserves available is 8.3 per cent of turnover; the total overseas payments in the form of dividends, royalties and technical fee represented only 3.1 per cent of turnover. By any standard these are modest returns compared with other group of industries. The pharmaceutical industry's financial position viewed from all angles cannot be termed as making huge profits. My colleague Mr. Roy, who has considerable experience of finance, will answer any questions on the subject of profitability, dividends, etc.

Research is the lifeline of the pharmaceutical industry and the base of growth of industry in each country has been in direct proportion to the amount of effort and money expended in fundamental and applied research. In the Fifth Chapter of the Supplementary Memorandum we have reviewed the question of research for the pharmaceutical industry. We have stated candidly what has been done in India; what remains to be done and what are the problems and difficulties. The statement that no research or

very little research, if at all, is being carried out by the pharmaceutical industry in India is not correct. Almost all enlightened pharmaceutical companies in India have up-to-date product development and quality control laboratories. Basic research has also been carried by several old established firms, such as, Alembic, Sarabhai, Bengal chemicals, etc. as well as by Hindustan Antibiotics. Nevertheless, it is to be admitted that the country's output in terms of basic research has still a long way to go. There are three fundamental reasons for this situation; first, basic drug research is extremely costly in terms of capital investment and recurring expenditure. America's research budget is approximately Rs. 175 crores per annum which is higher than our total production of pharmaceuticals in India. For each new drug discovered in the last decade, the industry has spent something of the order of Rs. 2½ crores in research and development. Basic research much sustain 3,000 or more failures to one successful new drug. Such massive outlay in research is only possible when our industry has grown sufficiently. Secondly, basic research must be undertaken as a coordinated effort in diverse fields of scientific endeavour by a team of experts.

Mr. Chairman: You need not repeat what you have said in your memorandum. You must leave some time for our Members to put questions.

Dr. H. B. Nanji: If complete information is made available to hon. Members about the two new drugs discovered by Hindustan Antibiotics, it will support our contention regarding the time it takes between discovery of a drug and its commercial manufacture. Hamycin was discovered in 1960 and after six years they have been able to commercially manufacture only a few kilos of this drug in spite of the favoured treatment given to public sector undertakings. The rate of royalty fixed by the Government of India, it is

understood, is 5 per cent minimum for this drug, while for the other, Dermostatin, it is 7½ per cent. According to press reports quoting the Minister of Petroleum and Chemicals Government will earn a royalty of Rs. 30 lakhs. The cost of of the new drug is Rs. 20,000 per kg. which is very high indeed, but this high cost phenomenon is generally applicable to all new discoveries. This company is seeking patent protection in foreign countries for a maximum period. What is sauce for the goose is sauce for the gander.

Patents are by no means symbols of foreign domination in either a political or economic sense. They make no inroads into our intellectual or scientific progress. It is an international institution to which all progressive-minded individuals and nations have voluntarily given acceptance. We cannot afford to ignore world experience, universal consensus, the UN recommendations and most of all, the recommendations of a very eminent Supreme Court Judge who made an impartial study of the subject over a period of years. If we pursue a dogmatic policy with obstinacy, it will kill the goose which has laid many golden eggs and promises to lay many more. We cannot put the clock back in the field of international co-operation. While inaugurating the new ordnance factory early this month, our Prime Minister said:

"Technology is progressing so fast that there is no sense in trying to duplicate all the effort when we can exercise the power of choosing the best results obtained elsewhere."

This is the logic of technological co-operation. The system of patents plays a major role in the intellectual field that is without parallel. Never before has man unlocked so many secrets of nature and applied them for the benefit of mankind. The stimulus of the patent system must be permitted to produce products and processes that will create jobs.

improve the health and well being of our country men and contribute to the social and economic aims of our country.

My colleagues and I have been extremely painstaking in preparing the presentation which I have placed before you. Your conclusions will be taken as almost the consensus of public opinion on the vital legislative measure before you. To that extent your responsibility is greater. My colleagues and I appeal that you may consider our views dispassionately and impartially and strictly on the merits of the subject.

Shri Bibhuhendra Misra: What according to you, is the total investment in the pharmaceutical industry?

Shri S. V. Divecha: Rs. 56 crores in 1962. It is estimated to be Rs. 150 crores by the end of the Third Plan, and the Fourth Plan figure is expected to increase to Rs. 190 crores. This amount represents only equity capital and not working capital, ploughed back profits etc.

Shri Kashi Ram Gupta: What is the total membership of your organisation, and out of it how many are Indian-owned firms with Indian capital, and how many have foreign collaboration and how many are totally foreign-owned?

Dr. H. R. Nanji: I have not got the exact breakdown, but I would say that our membership is 69, which includes most of the important companies having foreign collaboration, firms like Alembic, Unichem etc., which have no foreign collaboration, and two public sector undertakings.

Shri Kashi Ram Gupta: Can you give these figures later on?

Dr. H. R. Nanji: Yes.

Shri Kashi Ram Gupta: Also the figures about the total capital investment in those companies owned

by Indians and in those owned by collaborators or foreign firms, excluding the public sector.

Dr. H. R. Nanji: Certainly we shall provide.

Shri Kashi Ram Gupta: On page 14 of your second memorandum you have given the percentage on the basis of the turnover, but it is not a percentage on the basis of profit on capital investment. What is the reason for giving this on the basis of turnover instead of on capital investment?

Shri Keith C. Roy: As my colleague has said, we have made very serious attempts to try and place the financial position of the pharmaceutical industry in its proper context, and I would, with your permission, like to refer, in order to try and answer the question which the hon. Member has put, to the two articles in the Reserve Bank Bulletins of November, 1964 and November, 1965 which I hope will give some indication of the exact figures and the financial status of the pharmaceutical industry when measured by accepted financial standards.

Shri Kashi Ram Gupta: My point was quite different. My point is, what is the reason that the percentage of your total payments is based on the turnover, because that figure based on turnover is not scientific? Let alone the Reserve Bank Bulletin; why this percentage is arrived at in this way? That is the question.

Shri Keith C. Roy: It is because of the confusion, if I may say so with respect, created by the different concepts taken in the Reserve Bank bulletins of the three criteria which can be established for measuring the financial status of any company, that is to say, the equity capital; the net worth and the total capital employed. We have not yet, unfortunately, been able, within our organisation,

and in consultation with the Reserve Bank, to establish universally accepted criteria for these particular purposes.

Shri Kashi Ram Gupta: You have given the figures of dividend and royalty together. Is it possible to give the figures separately, showing the amount of dividends and the amount of royalty separately?

Shri Keith C. Roy: I have got the figures separately and I will make them available to you before I leave Delhi.

Shri Kashi Ram Gupta: These royalties are due to compulsory licences?

Shri Keith C. Roy: No, Sir.

Shri Kashi Ram Gupta: What is the basis of these royalties?

Shri Keith C. Roy: The Reserve Bank Bulletin of 1964 has taken the figures on the basis of the Royalty and Technical Service Remittances.

Mr. Chairman: Is it by agreement?

Shri Keith C. Roy: The 1964 Reserve Bank bulletin's figures are the results of a sample survey made of technical assistance and knowhow agreements sanctioned by the Government of India between 1948 and 1963. Therefore, the payments which are shown in Table 6 of the 1964 Reserve Bank Bulletin represent the royalty and technical service remittances which have been sanctioned by the Government of India under agreements which have been made by Indian companies with foreign firms.

Shri Kashi Ram Gupta: About clause 5, you have suggested that if the process system has to be adopted for patenting, the burden of proof should lie with the person who infringes. Can you give me instances of a clause in the patent laws of other countries which are governed by the process system?

Shri S. V. Divecha: The patent laws of Germany, Austria, Finland, Greece, Switzerland, Japan, Poland, Yugoslavia, Norway, Netherlands, Sweden and Canada provide for shifting of the burden of proof.

Shri Kashi Ram Gupta: As regards clause 47, Dr. Nanji in his speech said, that these imports should be covered which are of outside patents with similar processes, but so far as the amendment given by you and circulated yesterday is concerned, the language is not explicit. Will you please make it clear?

Shri S. V. Divecha: It is extremely difficult for the patentee to prove infringement particularly when the infringed product is imported from other countries because of the simple fact that it is extremely difficult to ascertain by examining the finished product by what process it has been manufactured. The model law for developing countries has incorporated such a provision and we have adopted this provision in our suggested amendment from the model law.

Shri Kashi Ram Gupta: In your suggested amendment, this is one of the local factors, but it cannot be made to apply to import because you have mentioned that it is imported by the same process.

Shri S. V. Divecha: Our amendment covers not only the imported, infringing product but also the product made locally by a infringer, because, as I said, it is extremely difficult to ascertain by what process a particular product is manufactured just by examining the finished product.

Shri Kashi Ram Gupta: Are you satisfied that the amendment of yours covers the point which Dr. Nanji has made about the import?

Shri S. V. Divecha: Yes, Sir.

Shri Kashi Ram Gupta: In clause 53 you have mentioned that 10 years'

period from the date of sealing will suffice in certain instances and in certain cases. May I inform you that the present Bill as it stands does not give any time-limit for the period between the completion of specification and the date of grant of the patent? There is no period fixed for it. Do you want that the period should be maintained or it may be left to the option of the Controller-General?

Shri S. V. Divecha: If I may be permitted to explain the whole situation, according to the existing Act, the patent is to be sealed within the maximum period of two years and four months, so that a period of two years and four months, that is, 28 months, elapses between the date of application of the patent and the ultimate sealing of the patent.

The position under the Bill is like this. Between the date of application and the filing of the complete specification a maximum period of 15 months lapses. Between the date of filing of complete specification and the examination proceedings—according to our information, the examination proceedings last on an average for about one year. Between the date of the first objection of the examiner and the meeting of the objection by the applicant a period of 18 months has been provided. In so far as the acceptance of the application is concerned or acceptance of the complete specification is concerned, this period has not been provided in the Bill and it is completely left open. In the Act as it stands at present, as I have said, the maximum period is 28 months.

Shri Kashi Ram Gupta: Are you in favour of the Bill as it stands so far as the period is concerned limiting it to the final acceptance of the patent, that is the date of sealing, or do you want a period to be fixed also so that within that period the sealing must be done?

Shri S. V. Divecha: Yes, Sir, we want the period to be mentioned.

Shri Kashi Ram Gupta: You have not mentioned any period; probably, you have not thought over it.

Shri S. V. Divecha: That is precisely what I am trying to point out. Under the existing Act it is 2 years and 4 months and now the Bill gives a maximum period of 4 years and six months. So I am entirely in agreement with the hon. Member when he suggests that some time limit should be fixed.

Shri Kashi Ram Gupta: Clause 66—while in your memorandum you have mentioned that the clause be suitably amended, in your amendments you have totally neglected that. Am I to conclude that you do not want any amendment or that you do not want to suggest any wordings for that and you want to leave it to the Government?

Shri S. V. Divecha: In our original memorandum we have suggested that there should be a judicial review against the decision of the State for revoking a patent. That is our suggestion. In so far as this clause is concerned, it is an exact reproduction of the existing Section 25 of the Act.

Shri Kashi Ram Gupta: There is no need for any amendment from your side?

Shri S. V. Divecha: No, Sir.

Shri Kashi Ram Gupta: About licensing of rights you have given your opinion. There is another strong view from the other side, from certain reputed firms, that licensing of rights should be there with the modification that the period should start after three years after the grant of patent and so far as royalty is concerned it should be negotiable. What is your opinion about these two amendments?

Shri Keith C. Roy: It is our submission that the concept of licences

of right is *per se* an erosion of the patent system. That is our basic objection to the concept of licences of rights. I accept that in other countries the concept of licences of rights exists, but I would like to stress the point that, in other countries, the concept is a voluntary concept, that is to say, the patentee himself voluntarily asks that the licence be stamped with "licence of right." In this case we have exactly the opposite position, namely, that a patentee who takes out a patent for a drug or medicine or a chemical is faced with the problem that his patent is automatically *per se* eroded the minute it is sealed, for the simple reason that, by the mere fact of sealing, any person interested can immediately apply for a licence of right. Secondly, the Controller has no option but to grant a licence of right. The orders on the Controller are mandatory and he can exercise no option in not granting a licence of right. Thirdly, in that action or, rather, I would put it, in that inaction, on the part of the Controller, he is not called upon to exercise any independent judgment as to the suitability, the capability and the financial stability of the person who applies for a licence of right to operate the patent.

Shri Kashi Ram Gupta: Basically you are against this clause. If these two amendments are there, that the date of licence of right should be three years after the date of sealing and that the royalty should be negotiable, will it not be an improvement?

Shri Keith C. Roy: No, Sir, we feel that the amendments which we have suggested should be considered. Section 87 which, *per se*, as I stated in the beginning, goes to the very root and conception of patent rights, is unnecessary.

Shri Kashi Ram Gupta: If these two amendments are there, will it not be an improvement?

Shri S. V. Divecha: The moment you put a limit of three years in respect of the concept which is known as licence of right and the moment you put other limiting conditions which apply to other kinds of compulsory licences in other fields, fields other than food and drugs, the concept of licence of right ceases to exist; in fact, it becomes compulsory licence of a different nature than the one that is contemplated in clause 84. Under the existing Act also, if you will see, there are two kinds of compulsory licences. One is compulsory licence in fields other than food and drugs, and the other is compulsory licence for food and drugs.

Mr. Chairman: You know that U.K. Act has got a similar provision?

Shri S. V. Divecha: UK Act has a provision similar to clause 86 and not clause 87.

Mr. Chairman: If a three-year period with guarantee is provided, why should you object to that?

Shri S. V. Divecha: That difference between clauses 86 and 87 is whereas in the case of clause 87 there is automatic endorsement of the patent "licenses of right" already from the date the patent is sealed, in the case of clause 86 the period of three years is provided. If within the period of three years, the reasonable requirements of the public are not satisfied, the Central Government can apply for such an endorsement to the Controller. This is the distinction.

Mr. Chairman: It is there in the UK Act also.

Shri S. V. Divecha: We have no objection to clause 86.

Mr. Chairman: Suppose a provision is made here which is similar to the provision in UK why should you object?

Shri S. V. Liveca: If the provision is similar to the one in the U.K. Act, we have no objection.

Shri Kashi Ram Gupta: There are three types of research—basic, development and formulation. Clause 53 provides a period of 10 years. What is your view on this?

Dr. S. L. Mukherjee: This ten-year period from the date of the complete specification will vitally affect basic research, it will affect somewhat developmental research also but not so much of formulation research. I say this with a certain amount of confidence and experience because I am intimately associated with pharmaceutical industry for the last thirty years, both in India and abroad. If I can spell it out, as to the concept of basic research leading to the discovery of a new drug, the birth of a new drug starts in the mind or brain of an inventor. With that idea he starts his first work in the laboratories, either in synthesising new compounds or starting with natural plans. If he has synthesised the compound, at the first flash of a positive pharmacological activity he takes out a provisional patent specification, which merely makes a statement of invention and nothing else; no example is required, no claim is required. That is, at the first positive sighting of a pharmacological property of a new compound and he files his provisional application. Between the provisional and the complete, one year or fifteen months is given, and that is the time when he actually starts intensive laboratory work. What he has done is he first found a compound, which has got this property. Suppose he has found some anti-tubercular compound which has shown some significant property. Around the basic molecule, he works and he synthesises hundreds of compounds to find out whether it is significantly good or whether a new compound is better than what his compound has first shown. So, that fifteen-month period, is used in finding out whether

his provisional specification will stand; otherwise, he would leave it out completely. Then a large number of analogous compounds are synthesised to arrive at the best in the laboratory and then the complete specification is filed, covering all grounds, after selecting the best compounds after detailed pharmacological, toxicological, biological drug metabolism studies are made. These are all laboratory tests to find out the highest therapeutic index and the least adverse toxicity factor. So, the detailed procedure of screening and establishing a new drug requires 7 to 8 years.

Shri Kashi Ram Gupta: That is not my question. Which type of research is affected by this provision about ten year period? Do you mean to say that basic research is more hit by this Bill?

Dr. S. L. Mukherjee: In addition to basic research, I also wanted to submit that process development work for making the production of new and known chemicals or pharmaceuticals, depending on the complexity of the synthesis, or isolation techniques, as in the case of antibiotics, requires nothing less than 4 to 5 years.

Mr. Chairman: In your own memorandum you have stated that practically no basic research is being done in India. Then, as you know, the tendency today is to shorten the period of patents for foods and drugs. Several countries like USA, UK, Canada, South Africa and New Zealand have set up committees to go into this question and some of them have actually reduced the period of patents. In this Bill we have prescribed ten years. Do you think it is insufficient for food and drugs, leave alone basic research? You have yourself stated that we are not doing basic research and that all that we are doing is quality control. So, do you think that the ten years period in the Indian law is insufficient?

Dr. H. R. Nanji: With due respect, it is not correct to say that no basic research is done in India. At the moment, Hindustan Anti-biotics, CIBA Aesearch Centre and Alembic are doing it. The momentum is growing and in the next ten years very considerable progress will be made in basic research. This ten-year period will come in the way of basic research.

Shri Kashi Ram Gupta: They could have suggested some extra period only for those patents which are applied for from the point of basic research. When the patents are applied for from other points of view, then naturally ten years should suffice according to their own statement. That is my point.

Dr. H. R. Nanji: The majority of patents, I should say, are taken only for products of basic research, not for development work.

Mr. Chairman: A lot of time is taken between basic research and finalisation of the actual product and the patent comes only after the drug is finalised, not before. It is only after pharmacological and clinical trials that the patent comes in.

Dr. H. R. Nanji: Clinical trials are held first.

Mr. Chairman: I know that.

Shri Kashi Ram Gupta: Your organisation is a big organisation and basic research can be done only when there is large capital. Has your organisation thought of having a basic research institute of your own in the country so that all these difficulties could be removed?

Dr. H. R. Nanji: There are a number of companies which have got plans for it.

Shri Kashi Ram Gupta: They are doing it separately. You say that Rs. 175 crores are spent in America only on research. This could be done only when there is a combined effort.

So, why do you not have a combined effort for this so that good results can come side by side with the public sector?

Dr. H. R. Nanji: Research on a co-operative basis is not possible in the private sector.

Shri Kashi Ram Gupta: There is no question of a co-operative basis. The question is of funds being made available to an institute which could be constituted by your combined effort, just as the Shri Ram Institute has its own funds.

Mr. J. Reece: In the pharmaceutical industry competitive research is very important. A number of different institutions working on the same problem are not necessarily duplicating the same methods of arriving at the solution. This has been recognised quite recently, tangibly, by the fact that single companies have set up competitive research institutes in other countries. Indeed, the Ciba research centre and other centres that are planned to be set up in India are a demonstration of the fact that a number of people now realise that if they can get competitive research going in different areas, it will result in better products more quickly.

Mr. Chairman: That means, bigger fish swallowing the smaller fish.

Shri Kashi Ram Gupta: So, basic research unit can be put up by these individual concerns. Then, what is the average capital expenditure and recurring expenditure on such a unit?

Dr. S. L. Mukherjee: We in the Sarabhai are already engaged in a certain amount of basic research with the idea of discovering a new drug. Our screening facilities today is of the order of 200 to 300 compounds in a year, which is nothing. We are seriously going into the idea of establishing a basic research unit which would be productive and remunerative. A lot of people have worked out the minimum critical size of a laboratory which will produce better re-

sults. You all know that the chance of striking a drug is in the region of 1:3,000 to 4,000. Unless a research establishment is set up to screen at least a thousand drugs every year, it may not be possible to find any new drug within three or four years. With that object in view we have attempted and tried to find out the minimum critical size of the laboratory which would require a capital investment in the region of about Rs. 60 lakhs and employ about 30 scientists with auxiliary and ancillary staff—125 in all—and the revenue expenses have been calculated at Rs. 30 lakhs per year.

Shri Braj Bihari Mehrotra: Dr. Nanji has suggested the deletion of clause 48 and has argued very vehemently for that. Will not the deletion of clause 48 help foreigners to exploit the situation?

Dr. H. R. Nanji: I cannot understand how clause 48 will enable foreigners to exploit.

Shri Braj Bihari Mehrotra: 90 per cent of the patents are held by foreigners. How does he say that the foreigners will not exploit the situation?

Dr. H. R. Nanji: All import is to be done by Government.

Shri Braj Bihari Mehrotra: He has said that the deletion of clause 48 will help the trade and industry. He has not described how the industry will be helped.

Mr. Chairman: This is a clause which enables the Government to import medicines.

Shri Braj Bihari Mehrotra: Even if the imports are made by Government, the money will go to the foreigners.

Mr. Chairman: He says, "Pay as compensation and give us an opportunity to be heard".

Dr. C. B. Singh: We have provided here different periods for other things

and for food, pharmaceuticals and medicines. How many countries are there in the world which make such distinction?

Shri S. V. Divecha: We will compile the information and give it to you.

Dr. C. B. Singh: You have given a list of per capita expenses on drugs in some of the countries, USA, UK etc. Have you any idea about the per capita expenses on drugs in India?

Mr. J. Reece: The per capita expenditure on drugs in India is an indication of the size of the problem. If you take the Third Five Year Plan target of Rs. 175 crores and if you take 450 million people. . . .

Dr. C. B. Singh: 490 million.

Mr. J. Reece: It will be in the region of Rs. 4 per head per year.

Dr. C. B. Singh: That figure compared to other countries is very small.

Mr. J. Reece: Very small.

Dr. C. B. Singh: With the idea of giving better drug facilities to an average Indian who cannot have even two square meals a day and not even clean drinking water, would you suggest anything to bring about a substantial reduction in the prices of drugs? Supposing most of the amendments proposed by your organisation are accepted, what do you suggest to bring down the prices substantially so as to make them available to the poor people in India?

Mr. J. Reece: This is a very difficult problem and a very different question.

Dr. C. B. Singh: We want to solve this problem.

Mr. J. Reece: First I may say, that patents are not directly related to high prices. If I were to give an answer to this question, I feel what we are really talking about is reducing the costs. Therefore, the costs of

pharmaceutical products in this country have to be considered. In order to maintain prices, which in the context of rising prices amounts to reduction in prices, the sort of thing we could conceive immediately would be either the abolition or reduction in direct taxes on the pharmaceutical industry. After all, there is sales-tax; there is excise duty; there is general taxation; there is customs duty on intermediates and all that. All these are, in effect, direct taxes on sick people. Now, even if we concede that you cannot abolish these taxes completely, it could be argued that for medicines these could be reduced and if they were reduced, then perhaps there will be something like a 10 per cent reduction in the prices of drugs straightway. If raw materials could be made available at lower prices, that would definitely result in reduced cost which would result in lower prices. Raw material costs are rising rapidly. The price of streptomycin, for example, has risen from Rs. 175 to Rs. 225 and it is going to rise again. In these circumstances we cannot think in terms of reducing prices.

The other suggestion about reducing prices and costs would be this. In the context of devaluation, we are hearing from many sources that if we could free the pharmaceutical industry from the artificial restraints of licenced capacity, we could increase our production per unit and increased production means lower costs and lower costs mean lower prices. If also we were released from arbitrary price control which has been imposed upon our industry, there will be free competition, and free competition, we also know, has reduced prices. Now, the chart which has been presented to the Committee demonstrates quite clearly that left on its own, the pharmaceutical industry has an enviable record of reducing prices.

Finally, we have already pointed out that with an expenditure on drugs of Rs. 4 per head per year there is a limit to what an individual

industry itself can achieve in this regard. It is surely no solution to force the pharmaceutical industry to work at an uneconomic level.

Dr. C. B. Singh: That I am not suggesting.

Mr. J. Reece: Then, there should be an extension of health services within the country which will help to bring drugs to the homes of poorer people at lower prices.

Dr. C. B. Singh: Will you suggest some such provision in this patents Bill specially for drugs of common use for an average poor man? Do you think something can be incorporated in this Bill?

Mr. J. Reece: Frankly, it seems to us that there are two separate questions, patents are one, and prices and health services, etc. is another. We honestly cannot see how a patent legislation by itself can properly incorporate all these other considerations.

Dr. C. B. Singh: In your graph that you have presented to the Committee about the production of basic drugs in India in 1964, you have mentioned the following figures:

Antibiotics . . .	Rs. 88.6 millions
Sulpha Drugs . . .	Rs. 15.1 „
Anti-Tubercular Drugs . . .	Rs. 14.0 „

All these three are, more or less, to fight certain bacterial and infectious diseases. The highest amount is being spent on antibiotics. Do you think something can be done to bring down the prices of these antibiotics which are the dire need of the country.

Mr. J. Reece: The bulk of the antibiotics figure is penicillin and streptomycin from the public sector in the country. But I ask: What do you mean by high prices? High in relation to what? If it is in relation to cost of production, then, if it is a complicated and a complex process, there must be a minimum cost of production

and, therefore, there must be a minimum price which has to be paid. If it is in relation to the results achieved, then, after all, today we can give a patient suffering from Pneumonia 12 capsules of antibiotics and he is cured. Before a cure could take many months. So, I want to know: High prices in relation to what? We say in answer to this question, if the artificial restraints are removed from the industry, prices will come down because we are constantly trying to cut each other's throat.

Dr. C. B. Singh: Evidence has come from the reputable persons who have appeared before this Committee to the effect that the abrogation of the patent law will bring down the prices and they have said that they will flood the market with cheap drugs. What have you to say about that?

Mr. J. Reece: I may just say one word in reply to that, that is, Italy. In Italy, the prices of drugs are higher than anywhere else in Europe. That is what would happen here.

Dr. C. B. Singh: Talking about research, in spite of the claims made by CIBA, Alambic, Sarabhai and even PFYZER to the effect that they are spending a lot of money on basic research, you will agree that though there was a strong patent protection from 1911 and it is still there, in spite of all this, there has been hardly any research in this country. Of course, something has been done in the last five or six years. But still there has hardly been any progress in the field of research.

Mr. J. Reece: The pharmaceutical industry is a new industry all over the world and has been in existence only for the past 15 or 20 years. Almost every country has been saying the same thing that, before the War, we were dealing only with a few vegetable products, a few simple drugs that required no investment or research and that it is only after the Second World War that the whole technology of pharmaceutical industry

has been developed. As you have seen from the progress of our own industry, we are on the threshold, we believe, of being able to make real use of technology that has come to India and we are in a position to make use of patent protection in order to discover more life saving drugs.

Dr. C. B. Singh: Your Association has taken a strong exception to the provision of licences of right. "Licences of right" has been incorporated because of a very important reason. You know the difficulty of the public in obtaining drugs. We, therefore, felt that a provision of this type would be of help to us. But you have taken a strong exception to that part of the Bill. How will you feel if we maintain those clauses and also incorporate that for licences of right, adequate compensation will be paid to the patentee? Will that be an improvement on the present provision in the Bill?

Mr. J. Reece: My colleague, who is more knowledgeable about it, has commented on licences of right. I would like to say something subjective. We are in the process of bringing a great deal of technology to India and licences of right is going to frighten the people away from bringing technology to India. We feel that a provision to bring in drugs in emergencies, for example, during an epidemic of cholera, etc., is already made; nobody will object to that; that would serve the purpose well. But we should not frighten people away from bringing technology by putting in this "licences of right" clause when it is not necessary.

Dr. C. B. Singh: Probably you know the background of "licences of right" and this brings me back to the unfortunate 4 or 5 cases going on in courts in this country. What have you to say on that part of it?

Dr. H. R. Nanji: I am particularly aware of one case—that of Neo-Pharma. The delay in the licensing procedure in their case has been due

to several factors. For some time I was acting as Consultant to this firm. Neo-Pharma have shifted their stand more than once. In the first instance, they had taken the stand that the process of their foreign collaborator was totally different. After some advice which was tendered to them, it was made clear to them that the process of Archifar clearly infringed the rights of Parke-Davis. Afterwards the stand was shifted and then they asked for a compulsory licence. The stand which has been taken by Parke-Davis is this: they are prepared to give compulsory licence direct to Neo-Pharma but not through a firm which they consider is an infringer of their patent in Italy. Moreover, there are quite a few suits pending against this firm—Archifar—in different countries and if Parke-Davis agree to give a licence in this country, it would compromise their position in other countries.

Dr. C. B. Singh: When the Neo-Pharma representatives came here, they gave an evidence that they tried their best to come to terms with Parke-Davis; they went to America and spent lot of money, but Parke-Davis people more or less rejected their terms for coming to an agreement. Is that correct?

Dr. H. R. Nanji: To my knowledge, that is not correct.

Shri D. P. Karmarkar: You had made observations here about patenting of product *per se*. Is it your idea that, if product *per se* is patented, then no one else will be encouraged to invent another process for the same product?

Dr. S. L. Mukherjee: I may express my personal views in this matter. The maximum protection that could be given to an inventor is product *per se* protection, but in view of our country's development and existing research facilities, etc., I am of the opinion that product by process would be an ideal

protection at least for some time to come.

Shri D. P. Karmarkar: This is regarding your observations regarding Clauses 99 and 100. There you say "for the purpose of government". Would you be happy if instead of "for the purpose of government", the words "in public interest" are substituted public interest meaning defence, security of the country, epidemics, bringing the prices down and things like that.

Dr. H. R. Nanji: Bringing down prices cannot be considered as public interest. Unless you examine all the factors for the price rise, it cannot be considered as a matter of public interest. Defence and other consideration would, of course, be matters of public interest.

Shri D. P. Karmarkar: A point was put up before us sometime ago that, in order to avoid multiplicity of forum for filing suits of infringement, there should be only one forum for the country, so that the party against whom the so-called aggrieved party is proceeding may not be made to run to Madras, Calcutta or Bombay. Would you prefer a single tribunal for this purpose?

Shri S. V. Divecha: Are you suggesting a single patent appeal tribunal?

Shri D. P. Karmarkar: Not appeal, even in the first instance.

Shri S. V. Divecha: According to the Civil Procedure Code, the creditor finds the debtor and not that debtor finds the creditor.

Shri D. P. Karmarkar: Let us forget the Civil Procedure Code. Let us concern ourselves only with patent laws. In view of the possible number of forums into which a party may be dragged for a possible infringement and considering the number of such cases that may arise, would you think that it will be in the interest of both the parties if there is a single tribunal for this purpose at a central place?

Shri S. V. Divecha: Decentralised tribunal would necessarily be a High Court, I think. If that is so, we would have no objection.

Shri D. P. Karmarkar: The other point is with regard to judicial tribunal. We mean by that a particular kind of tribunal. Dr. Nanji mentioned about Income-tax tribunal, sales-tax tribunal, etc. These have on their panel men of proved judicial experience. These are established under various laws. Do you think these will work and would be enough for your purpose?

Shri S. V. Divecha: They might work.

Shri D. P. Karmarkar: Dr. Nanji also said something about the Price Advisory Commission like the Tariff Commission. Presumably it would be functioning not only with regard to the fair prices for new manufactures, but would also regulate prices of imported products. Would there be any objection to that? I am asking this question specifically because along with patent rights there is the right of exclusive importation for a certain period. There are some cases before us where some people have taken the advantage of that monopoly. I do not want to cite instances. You should be knowing them. Under such circumstances, would this body also function in relation to the fixing of proper prices for imported commodities also?

Dr. H. R. Nanji: Tariff Commission has already instituted enquiries in regard to three or four drugs in the past. While doing so, they will certainly take into account the reasonable price for import. If the import price is regulated by indirect measures like customs duty...

Shri D. P. Karmarkar: Other things being equal. Today the price is very high in spite of all that. The law allows you perfect freedom to fix any price. Under the Essential Commodities Act or the emergency there are

no powers. If the consumers are to be protected, there should be some mechanism to advise regarding prices of imported commodities also.

Dr. H. R. Nanji: If the Tariff Commission comes to the conclusion that the prices are very high, there is already a machinery for taking care of the matter. There is a schedule in the Red Book.

Shri D. P. Karmarkar: Red Book merely says what shall be imported and what shall not be.

Dr. H. R. Nanji: There are a number of drugs there.

Shri D. P. Karmarkar: Drugs are mentioned and it says that the prices shall not be more than this. It only regulates the type of drugs. In essence I think you agree that there should be some reasonable mechanism acceptable to everybody to regulate the prices of imported things.

Dr. H. R. Nanji: Yes.

Shri M. L. Jadhav: The Model Law suggests ten year period for the patent from the date of specifications. The present measure also suggests the same thing. Have you got anything to say on this?

Shri S. V. Divecha: So far as the model law is concerned it is true that it suggests that the patent will be valid for at least ten years. I would however invite attention to page 49 of the Model Law. I would read from it:

"It is, however, to be noted that too great deviations from the generally accepted standards would not be to the advantage of any country because it is in the general interests that rules concerning duration be fairly uniform throughout the world."

Shri M. L. Jadhav: From your observations, am I correct to say that

you have no objection to the use of the patent by Government for epidemic or defence purpose and you only object to its being used by public enterprises?

Dr. H. R. Nanji: You are right.

Shri M. L. Jadhav: Do you think that patent is one of the important factors in keeping the high prices of medicines?

Mr. Chairman: There are several other facts. He said that. He elaborated on that.

Shri M. L. Jadhav: The price of Tolbutamide powder varies between some Western countries, Italian concerns and your member-firms. Can you explain the reasons?

Mr. J. Reece: The chart which we have given sets out two things. One is to demonstrate that prices in India are not uniformly higher than elsewhere as has been alleged. The other is to show that price in Italy is not the lowest in the world. There are differences and variations, and Dr. Nanji explained in his exposition the difficulties in comparing international price. The point I would like to make is that we should not consider one drug, but the fact is that in Italy a consumer is paying more for his drug than in Europe. That is the general principle over the whole range of pharmaceutical products.

Shri Arjun Arora: May I know how many members of this organisation are firms which are absolutely foreign to India having no Indian capital?

Mr. Chairman: He said he could not give the break up. He will send that information.

Shri Arjun Arora: How many of the members are subsidiaries of foreign firms and of the subsidiaries how many are wholly owned and how many are partially owned and in the case of partially owned, who are the Indians who own in part?

Dr. H. R. Nanji: We will send the information.

Shri Arjun Arora: How many members of this organisation are firms which have collaboration agreements with foreign firms?

Dr. H. R. Nanji: We can send it.

Shri Arjun Arora: I would also like to know how many are patentees and how many are licensees of foreign patentees? Is there any member who is using no foreign patent and having no foreign collaboration?

Mr. Chairman: Can you answer that?

Dr. H. R. Nanji: We will send the information.

Shri Arjun Arora: Is there any organisation which has no foreign capital, no foreign patent, but is absolutely *Swadeshi*?

Dr. H. R. Nanji: I have already mentioned the names of Alembic and Unichem.

Shri Arjun Arora: You also mentioned Sarabhai Chemicals who are famous for collaboration agreements. May I know whether your big organisation is so powerful that it can lure away the members of the staff of the Prime Minister's Secretariat and has ever cared to conduct a survey relating to the period during which the cost involved in research was recovered? We have been subjected to long lectures on virtues on patent and we have also been told that patents are necessary because cost is involved in research. So, we would like to know as to what is the period during which an average firm recovers the cost of research of a particular drug and whether your organisation has carried out any survey amongst your members relating to this?

Mr. J. Reece: In answer to this question, I would say that nobody has done any survey on the cost of research done for a particular drug.

Research cost is a general charge on the company. In some cases, as you must have heard already, vast sums of money are invested without any return whatsoever. I may make my point clear. If a company is making pharmaceutical products and marketing them under its own name, at some stage or other, it will have a competitor in the pharmaceutical industry. Even if I discover a new drug I can't guarantee there will be no competitor as Dr. Mukherjee explained. I may put in Rs. 7.5 lakhs as my capital and only get a return of Rs. 5.0 lakhs out of that. In that event I do not get anything from that for the future. Take for example the discovery of a drug that would cure cancer. That would be the most expensive drug in the world if ever it is put on the market. Think millions and millions of rupees that have been spent in trying to discover a drug for curing the cancer. For all the drugs which an individual company makes, it has its own allocation and assessment of the future and as such puts aside a certain amount of its earnings to do research. It may or may not succeed.

Mr. Chairman: We heard CIBA. Is there any other company which has invested money on research?

Mr. J. Reece: There are a number of companies who have done that. If I may submit, there are different ways of trying to do research. In the case of CIBA, they had chosen to put up a research centre with scientists who will try to discover a new drug.

Mr. Chairman: That we have seen. Excepting CIBA is there any other company?

Mr. J. Reece: You yourself have seen in our own case that four or five different teams are working on an entirely different basis.

Mr. Chairman: That was only qualitative control.

Mr. J. Reece: With due respect say that it is not qualitative control.

We have discovered several new process methods. In the near future, they are going to make a major contribution to our company's chief activity. They relate to the utilisation of local raw materials. In this case Indian Chemists have put their heads together to find out the methods of import substitution for the basic raw materials. This is process research, and we expect that it will not be long before we get results from it. Of course research is costly.

Shri Arjun Arora: May I now whether all the expenses that you incur on research of various drugs which you are able to find you put them as normal expenses of the industry?

Mr. J. Reece: It is like that. In certain other countries an amount is allocated for research in order to try and demonstrate the cost. In answer to the question whether we have put up different research sections, I would say that there is now a Glaxo Research Company that does not make any product for sale. It is an investment in research.

Shri Arjun Arora: You may not be doing.

Mr. J. Reece: We have been doing production not in terms of research.

Mr. Chairman: Do you mean to say that research is only an answer. If you refer to the report in the U.S.A. you will find that 35 per cent is on sales promotion.

Mr. J. Reece: I cannot say. The quantum of what is reasonable to spend on research is something for individual companies. Some companies have spent much more than the figures which you have mentioned. Some spend nothing at all.

Mr. Chairman: I am telling you from the Committee Report. It says: From only 1961 onwards 4 per cent of the profits is spent on research and this may be recovered in about two

to three years' time. From the production of about 700 million dollars, 35 per cent or so has been spent on sales promotion. Do you agree with this?

Mr. J. Reece: I do not agree with this figure. I cannot challenge the figures you have stated. But, I cannot agree with the view that the research is a minor part of the pharmaceutical industry. I have no doubt that the question of sales promotion will come up again in some other context. How much is to be spent on research etc. is a matter of opinion. Take for example Hindustan Antibiotics which is a research based unit.

Mr. Chairman: It is a public concern—a Government concern.

Mr. J. Reece: It has allocated one per cent to research.

Mr. Chairman: However, the amount is spent by Government.

Mr. J. Reece: I say that it has allocated a certain amount on research which comes to 1 per cent.

Mr. Chairman: It is only from the percentage of profits that they are making. In their case, it is made by C.S.I.R. or Government.

Shri Choudhuri: Hindustan Antibiotics is a private company coming under the Indian Companies Act. Its research expenses come out from its sales.

Mr. Chairman: Though it is a company, it is a public undertaking.

Shri Arjun Arora: My question leads to so many supplementaries. Now coming back to my question I put to you, your view is that research cost is not allocated to a particular drug. So, there is no question of recovery of the cost on research from a particular drug. You may spend a large amount of money with no results and may spend larger amounts and

discover a drug which will not use the large profits. Yet you may discover something which does not cost you much which gives much yield. Is that the position?

Mr. J. Reece: That is exactly the position.

Shri Arjun Arora: Would you tell me which of the Members of your organisation is engaged in real basic research irrespective of the cost?

Dr. S. L. Mukherjee: I can speak only for my organization, Sarabhai Chemicals.

Shri Arjun Arora: You are not appearing only for Sarabhais. You are appearing for the Organization of Pharmaceutical Producers of India.

Dr. S. L. Mukherjee: As I told you our annual turn-over of new compounds in our Basic Research Division is about 200-300. We are also taking advantage of screening facilities as available with the Central Drug Research Institute, Lucknow where we do not have the facilities with us.

Dr. M. M. S. Siddhu: Are you paying anything for those facilities?

Dr. S. L. Mukherjee: We have tackled this question but they are not accepting any payment.

Dr. M. M. S. Siddhu: So you get it free.

Dr. S. L. Mukherjee: We have got only 20-30 compounds screened by them, so far.

Shri Arjun Arora: While on this subject of research, I would like to know whether the drug industry or the pharmaceutical industry would prefer to have an institution like that of ATIRA in Ahmedabad where the cotton textile industry has combined, collected funds and set up an organization like the Cotton Research Institute?

Dr. S. L. Mukherjee: To my understanding and experience, the development of a new drug requires a tradition, a culture and a definitely different discipline and if you would look around, you will see that the individual companies' research efforts have contributed uptill now everywhere in the world to 95 per cent of the drugs that have been discovered till this date. It is not through Universities and co-operative research associations that the drugs have been manufactured. I do not know the reason, but to me it appears that when we work in the industry, we have a pragmatic approach. We have quite a different discipline. We have perfect team work, which may not be there in Universities or co-operative research associations. Secondly, I say from personal experience of the CBRI, when we approach them to get some drugs screened through their facilities, a condition is imposed on us, that we must disclose the identity of the drug, before they can take up the work. Many private firms would hesitate to disclose the identity of the drug to such co-operative institutions. So, it is research within industry that will give the results. Hayemycin is one such example. Unless you set up research within the industry itself, as also help to create the necessary climate and the conditions for research, it is my considered opinion that it will take a long time for invention of new drugs.

Shri Arjun Arora: May I understand that the drug industry in India is not only a research-based industry but is also an individual based industry in which no co-operation is possible?

Mr. J. Reece: May I just say a few words on this? One of the advantages of putting the research into a commercial company instead of a public laboratory is you select the scientists and you follow up the research done by them internally on a certain project and if they are doing something which

will be of no use to anybody, you can call a halt to the Project, and divert them to other more useful avenues.

Shri Arjun Arora: From the national point of view if two or more than two firms are engaged on the same research, the ultimate result is waste in two or three places.

Dr. S. L. Mukherjee: I think competitive research is absolutely necessary. There I differ with the views expressed by the hon'ble Member.

Shri Arjun Arora: Some people seem to think that absence of a patent law gives a momentum to research. What is your opinion on that?

Mr. J. Reece: If there was an abrogation of patents—we are not discussing abrogation of patents and it is also not contemplated by the present Bill—it would stop research. Prof. Ermst Chain, one of the great scientists of our age, has written on the development of Penicillin and he put the whole thing in a nut-shell—'No patents, no new drugs'. Prof. Fleming did not get a patent for his discovery of penicillin but initially no one was interested. It was research in the pharmaceutical industry that developed the means of making penicillin available to the people.

Dr. S. L. Mukherjee: May I supplement one part of Mr Reece's statement? Penicillin was declared as a drug of unstable character, of no human interest at the time of its discovery. That was the declaration of Prof. Raistic of the London School of Hygiene and Tropical Medicine and he declared that penicillin will not be of any commercial use because it is quite unstable.

Shri Arjun Arora: Coming back to royalty, what do you think should be the fair rate of royalty?

Dr. H. R. Nanji: We have already submitted that. All we want is not to have any ceiling on royalty. In some

cases even the 18 per cent is too much. In other cases it will be necessary to have more.

Shri Arjun Arora: Your conception of royalty is: reward for research.

Mr. Chairman: He wants it to be left for negotiations.

Shri Arjun Arora: Your conception of royalty is that it is a reward for research and they are unable to allocate expenses on research relating to particular drugs. Am I to understand that they want the industry to run profitably but do not expect royalty from each item of research?

Mr. J. Reece: A man may be working on a certain project for 20 years another man may in the course of half an hour discover something. How do you assess it and what value are you going to place on the finished product. You have seen the pharmaceutical plants and you will realise how complex the processes are—very very complex drugs and surely therefore there can be no fixed return for research.

Shri Arjun Arora: So you want royalty to be a matter of bargaining?

Mr. J. Reece: That is correct, Sir.

Shri Arjun Arora: Because you can't suggest any scientific basis for its determination?

Mr. J. Reece: Correct, Sir.

Mr. Chairman: Royalty is paid to the scientist or to the firm?

Mr. J. Reece: To the firm.

Shri Arjun Arora: What is the highest rate of royalty any of your members is paying to any patentee?

Mr. J. Reece: I can give one example. Very recently in England, in a negotiation for royalty on a particularly complex process, the department of the Government which

awards royalties, awarded 18 per cent as royalty for this particular process. It was 18 per cent on sales, not on bulk. I can't remember the patent, but I believe the firm was Geigy.

Shri Arjun Arora: I want to know the highest rate of royalty that any of your members in India is paying to a patentee whose patent you are exploiting under licence.

Mr. J. Reece: I would like to be able to give the answer because I am sure it is a very low figure and in some cases no royalty is charged at all. We must look up that figure and give it to you.

Shri Arjun Arora: Also please look up what is the lowest rate that any of your members is paying and send it to us.

Dr. H. R. Nanji: For this information, the best source would be the Department of D.G.T.D. They have got all the data about royalties.

Shri K. V. Venkatachalam: In some cases it is as high as 15 per cent because that was in accordance with the policy of the Government at that time 10 years ago. Now, progressively the rate of royalty is being brought down. It is round about 5 per cent now.

Shri Arjun Arora: I want to confine my information to the members of this body.

Shri K. V. Venkatachalam: What I have said will broadly apply to the members of this body also.

Shri Arjun Arora: No, I want the exact information. Please collect this information—the highest and the lowest rates of royalty that any of your members is paying—and send it to us.

Now, do you agree with the concept that there should be a progressive reduction in the rate of royalty as time passes?

Dr. H. R. Nanji: Royalty agreements are always subject to revision every five years, and at that time Government does bring pressure to reduce it. Sometimes no royalty is paid after five years.

Shri Arjun Arora: Leave pressure alone. Pressure can be rightly applied or wrongly applied and when wrongly applied, it will result in explosions. Should there be a general rule that royalties should be progressively reduced every year or so?

Shri Keith C. Roy: I think the Hon'ble Member may be aware that one of the main features of general collaboration agreements these days is that all new know-how is also made available in addition to that which is made available under the original agreement. Therefore, my submission is that it is not a correct concept to say that the rate of royalty should gradually be reduced.

Shri Arjun Arora: You have told me about what is happening. I want to know your views about what should happen regarding progressive reduction of royalties.

Shri Keith C. Roy: My answer is that it is not a correct concept to suggest that the rates of royalties should gradually be reduced.

Shri Arjun Arora: Are you agreeable to the proposition that the cost of drugs should be such that the consumer is able to get it and that the prices must be progressively reduced?

Mr. J. Reece: As we explained already, in a free area of competition, this is exactly what happens.

Shri Arjun Arora: Should it be laid down that after every two years or so, the prices should come down by a certain percentage?

Mr. Chairman: How can we lay down? It is beyond the scope of the present Bill.

Shri Arjun Arora: Mr. Chairman, I want these experts to tell us how the prices of pharmaceutical products in India can be brought down.

Mr. Chairman: He has already said that there should be no control, taxes should be reduced, raw materials should be supplied at a lower rate and so on.

Shri Arjun Arora: On page 14 of the Supplementary Memorandum on Patents Bill, the table gives the turnover of the whole industry or only of your members?

Shri Keith C. Roy: As Dr. Nanji said, at the time this survey was made, we had something like 67 members. I think, perhaps, I might state, in order to try and put these figures into their proper perspective, that there are some 1700 or 1800 units in India manufacturing pharmaceuticals. Of these units, approximately 125 are registered with the Directorate General of Technical Development and are considered to be the major units. Of these 125 major units, at the time this report was prepared, we had some 65 members. The production of those 65 members represented over 50 per cent of the total production of the country. That was, Sir, in 1965, Rs. 135 crores. This sample survey, of which the figures are placed on page 14, represents the turn-over of practically half of the total value of the production of pharmaceuticals in India.

Shri Arjun Arora: Could you please tell us how many of these concerns included in the Survey are subject to overseas payments or are all of them subject to such payments?

Shri Keith C. Roy: I will have to explain the details to you. I will send them to the Committee. I am sorry I do not have all the figures with me on that basis.

Shri Arjun Arora: You have said that the overseas payments are 3-1 per cent of turn-over. In case the

total turn-over figures given by you include firms like Unicom which do not make overseas payments in the form of dividends, royalties etc., your percentage is altogether wrong.

Shri Keith C. Roy: I submit with respect, Sir, that the figure is not wrong.

Shri Arjun Arora: Percentage can be very elusive thing.

Shri Keith C. Roy: It may be elusive but . . .

Shri Arjun Arora: 3.1 per cent of what?

Shri Keith C. Roy: Of turn-over.

Shri Arjun Arora: Whose turn-over?

Shri Keith C. Roy: Of the turn-over of the units which were surveyed, and who represent half the total production of India.

Shri Arjun Arora: Could you tell us how many of these half the producers of the pharmaceuticals in India do make overseas payments and how many do not and what are their respective terms?

Shri Keith C. Roy: I am sorry, Sir, I have not got the figures with me. I will supply them.

Shri Arjun Arora: My submission is that 3.1 per cent is a cooked figure. Coming to page 20, at the bottom, you have said: "None of the firms producing the imitation products, whose prices were considerably lower than the original, have been able to remain on the market". This is what you say about Italian firms. What is the basis of your assertion that firms whose prices were considerably lower than the original were driven away from the market by concerns whose prices were considerably higher?

Mr. J. Reece: These figures were supplied by a particular person who

was interested in this particular subject, but it is not really very difficult to appreciate because we are dealing in drugs, pharmaceuticals and medicines for the cure of sick people and one of the most important ingredients is the ingredient of confidence. If somebody offers you a drug at a very low price, it is natural for many people to immediately question whether it is going to do what the makers claim it would do, or not. There is a story which we tell to our representatives during their training course about the question of confidence and to stress the need for them to be well-equipped and to know their subject. It relates to a man who bet another man: "That I will not be able to give away a guinea for Rs. 10" and the person did not believe him. So that man went out into the street, dressed himself as a beggar, stopped passers by and said: "Here is a golden guinea. Will you please give me ten rupees". And no body took it.

Shri S. V. Divecha: This information which we have was gathered from an official report by Professor Bergami of Italy to the Italian Government.

Shri Arjun Arora: Am I to understand that higher pressure—the salesmanship which firms charging more are able to indulge in because they can afford to spend more on salesmanship—has achieved this miracle.

Mr. J. Reece: Not that at all. It is basically an understandable desire by the medical profession and people who want to get their products like drugs, or food, from companies who are reasonably well established in a particular field and have a reputation, because they know that those companies are not profiteering because they know that the money that have spent on quality control etc. is going to guarantee that product.

Shri Arjun Arora: Indian members of the delegation will perhaps be able to appreciate, in India everything

which is cheap sells faster and if you have any guinea, I am prepared to buy it for Rs. 20 right now.

Mr. J. Reece: I have not got one, Sir.

Dr. S. L. Mukherjee: What is true to public may not be true to the medical profession. We are dealing with selective medical profession. They may not accept the lowest, they accept the best.

Shri Arjun Arora: Doctors take pleasure in prescribing costlier medicines.

Mr. J. Reece: No, Sir, they do not take pleasure. In fact, one of the main arguments we can produce to demonstrate that our prices are reasonable is that they go through the medical profession and it is the medical profession which alone has to decide what to prescribe for their patients; and this is a real control on the question of cost and price.

Shri Arjun Arora: May I know what is the percentage of turn-over that your members spend on advertising, samples, literature sent to doctors, presents made to doctors etc. that is salesmanship?

Mr. J. Reece: It will take a few minutes. Can I make a few general remarks which, I think, are necessary? It is no good discovering a cure for cancer if nobody knows about it. This is the basic postulate. Now, we have to accept it as a cardinal principle that the doctor must have the freedom to prescribe whatever medicine he considers necessary for the treatment of his patients, and the pharmaceutical manufacturers are in competition with each other to satisfy the individual and collective requirements of the medical profession. Thus we are dealing with a limited group of people—doctors—who are going to decide whether or not a product should be used. And the industry never assumes that a doctor is unaware of price because

he is not. Now, there is another very important thing which, I hope, will be borne out by the hon. Members who are in the medical profession and who are on this sub-committee. There is a natural resistance to the adoption of new scientific ideas and drugs. There is no guarantee that a doctor will automatically prescribe a drug just because we tell him it is good. And there is another important point, Sir, and that is that it is absolutely essential that the pharmaceutical industry should be in direct and constant contact with the medical profession about the drugs it is making. So this is the whole form of how medical information comes to the pharmaceutical industry. Now we made a survey of our members to find out as to how much we spend on sales promotion and the figure comes to something like 8 to 9 per cent. This figure includes expenditure on advertisements, literature, samples to doctors, etc.

Shri R. P. Sinha: How does it compare with other countries?

Mr. J. Reece: 11 per cent is the figure given in the UK, and perhaps it is not surprising that in America it comes to something like 25 per cent.

Shri Arjun Arora: You claim that some sort of medical education of doctors is part of the responsibility of the industry?

Mr. J. Reece: Far from it. We cannot even dream of giving any sort of medical education to doctors. We only inform them about our drugs and it is for the doctor to judge whether a particular drug is good or bad.

Shri Arjun Arora: Page 36 seems to have been loosely worded by somebody in your organization. You have pointed out that competition is useful.

Mr. J. Reece: With due respect, Sir, I submit that I am talking about Indian conditions. It is quite true that in other countries you can quote the pressure of sales promotion, which does

have an effect and influence on price. In our Indian society we do it to a price lower extent, there is much more information, and much less of what is known as pressure promotion.

In Italy, Sir, there is no patent protection. From the moment you market a drug, anybody can copy it. It is one of the rules of selling that the company which gets in first gets a major share of the market and so the moment a new drug is known everybody goes all out to do the maximum amount of sales promotion to the doctor. Now the amount you spend, Sir, has no relationship to the type of promotion you do. If I discover a new drug tomorrow, how am I going to contact one hundred thousand doctors in India? How much it will cost me to go and fly all over the country? It is a question of coverage. In Italy, where there is no patent protection everything is spent on promotion to get him (the doctor) first. It is not that in Italy the industry has to spend much more on promotion than anywhere else. Everybody is spending on it.

Dr. M. M. S. Siddhu: Am I to understand that the doctors will choose a drug coming out of a reputed house and the reputed houses need not spend on promotional activities.

Mr. J. Reece: No, Sir, that is not the case. As a matter of fact the houses of repute in this industry have to spend much more than others on promotional activities.

(The Committee then adjourned to meet again at 15:00 hrs.)

The Committee reassembled at 15:00 hrs.

Shri Arjun Arora: May I know whether any of the very experienced and learned witnesses have come across any cases where patents have been granted, process patents or product patents, even though they should not really have been granted?

Shri S. V. Divecha: I suppose the question is whether we have come across any cases where a patent has been granted which ought not to have been granted, for a process.

Shri Arjun Arora: Both process and product patents.

Shri S. V. Divecha: This is a matter of statistics. To the best of our knowledge, we are not aware of any such processes, but perhaps the controller would be in a better position to give this information.

Shri Arjun Arora: What precautions would you suggest to ensure that we in this country do not grant patent protection where the patents asked for do not really qualify for such protection?

Mr. Chairman: How can they answer this?

Shri Arjun Arora: What precautions do they suggest?

Mr. Chairman: It is for the controller to say.

Shri Arjun Arora: The witnesses have commented on everything. They can answer this also.

Mr. Chairman: How can they say whether a patent is to be granted or not? It is for the patent controller.

Shri Arjun Arora: Suppose.....

Mr. Chairman: There is no question of any supposition. The hon. Member must ask questions within their knowledge.

Shri Arjun Arora: What in their opinion should be the preventive steps to ensure that patents are not granted in cases which do not qualify for such patent protection?

Dr. H. R. Nanji: If they are doing so much of research in the patent office, then normally this kind of thing should not happen.

Shri Arjun Arora: Are they satisfied with the handling of the matter by the patent office in this regard?

Dr. H. R. Nanji: There is no other possibility.

Shri Arjun Arora: How does industry reward the individual scientists who are responsible for inventions? Does industry take away all the profits of the invention on the presumption that the scientist is being paid by it?

Dr. S. L. Mukherjee: There are several ways of rewarding the scientist. There is no set-rule. It differs from company to company and the invention's importance. The first is payment of a lump sum. The second is raising his salary for each invention that goes into commercial production. The third is giving him facilities for further research.

Shri Arjun Arora: The reply is theoretical. Please give specific examples.

Dr. S. L. Mukherjee: For example, for a few patents in India I was rewarded by being given one per cent on the sales of the products.

Mr. J. Reece: Before coming to India I worked in Glaxo Research and my reward was doing that research. Secondly, I had at my disposal the resources of a large company with all the equipment which they could possibly provide, but for which I would not have been able to fulfil my research ambition at all.

Shri Arjun Arora: Would you like any rules being made by the Government in this respect or are you satisfied with the way that industry is rewarding individuals for their inventions?

Mr. Chairman: It is beyond the scope of this Bill. It does not come under the patent law. Anyway, it is

a matter for the Government to look into.

Shri Arjun Arora: It is a matter for this Committee to look into. We can certainly say that one-fourth should be given to the individual responsible for the invention. I am entitled to bring forward such an amendment and I shall press it.

May I know if there have been any inventions by Indians, whether individuals or firms, during the period of the first and second world wars and during the post-war period?

Dr. S. L. Mukherjee: If you mean making a new process for a product which had been patented by other processes, there have been several hundreds by Indians. If you mean discovery of new drugs, we are in the beginning stage, and except for Hamycin and Dermostatia we are not aware of any drug which has come to the market out of Indian invention.

Shri Arjun Arora: So, am I to understand that the patenting of drugs will mean largely rewarding individuals and firms outside India and not within India, because you say there have been no inventions here during the last 50 years or so?

Dr. S. L. Mukherjee: What I said does not mean that we will not reward inventors. If an inventor has done any good to the cause of humanity, wherever he may be, he must be rewarded and his invention must be protected. I do not agree that there have been only minor process improvements. I can say from personal knowledge that we have made processes for anti-malarial and anti-tubercular drugs, and many new processes have been discovered by Indian scientists against the processes which have been patented in India. I feel that at the present stage of research, with the facilities given to the Indian scientists, this is a major contribution.

Shri Arjun Arora: Taking into consideration the present position and equipment for research in India do you think it must take at least 20 years for Indian scientists to be able to compete with foreign scientists in the matter of inventions?

Dr. S. L. Mukherjee: It will depend upon the facilities given to the young scientists and how soon they can come up. The present facilities for basic research are completely inadequate because, if you permit me, I will go a little into the background of the pharmaceutical industry. The pharmaceutical industry in 1948 had a turnover of about Rs. 10 crores. In 1958, the turnover was Rs. 54 crores; in 1964 the turnover was Rs. 135 crores. What we have done, when the turnover is low, is to concentrate on the formulation research.

Shri Arjun Arora: Turnover may not be relevant to invention and research.

Dr. S. L. Mukherjee: I am talking about the background.

Shri Arjun Arora: The turnover may increase merely by increasing the facility.

Dr. S. L. Mukherjee: Without an increase in turnover, there will be no investment, no encouragement for investment of the industrialists towards research. As you will appreciate, research itself is a gamble of the highest order, so far as the discovery of new drugs is concerned. As I said earlier, to create minimum facilities for basic research, it requires Rs. 60 lakhs of capital investment and Rs. 33 lakhs recurring. Unless many units of that nature come into India, we could not achieve results. We cannot say what would be the time that it takes; it may be five years. If you are lucky, you will strike at the results within two or three years. A stroke of luck is always there. People have pursued for 10 years and yet they have not

found out a drug. I think hon. Members will realise that once the facility is created, the Indian scientist is not far back in their mental outlook and capacity to go forward for doing good work in research.

Shri Arjun Arora: Will you agree with my proposition that considering the present facilities for research in India, there is a case for a holiday from patents for 10 years to 15 years, just as they talk of a tax holiday?

Dr. S. L. Mukherjee: The present facilities are not adequate enough and as a scientist attached to industry, I feel that the present facilities will be considerably increased during the next 10 years, and within these 10 years we will be able to do something. The other firms abroad have shown that within a decade a lot of things could be done. We hope we will be able to follow them.

Shri Arjun Arora: You have stated the truth but only the half-truth. My proposition is that if we have a holiday from patents for 10 years, there will be an enormous increase of production in the country and there will be a larger turnover and the industry will have a greater fund.

Mr. Chairman: His answer has come.

Shri Arjun Arora: We will be able to get a greater amount of research. What is the harm, in reproducing Italy here?

Mr. Chairman: It is a matter of opinion. It is a matter for you to decide.

Shri Arjun Arora: I want him to answer. What Prof. Mukherjee is saying supports my case for a holiday from patents.

Mr. Chairman: If he supports, you take it. The answer is already given.

Dr. S. L. Mukherjee: Taking a holiday from patents will be thwarting the inventions, and I personally do not like it.

Shri Arjun Arora: May I refer you to page 2 of your original memorandum submitted in January wherein you have thought of some payments commensurate with the value of the inventions. How do you compute the value of inventions? I mean the fourth line from the bottom.

Shri S. V. Divecha: We have stated in the memorandum that the royalty should be commensurate with the value of the invention. There are several cases laid down on the aspect of determining the compensation of royalty payable to a patentee in the case of a compulsory licence, and this subject may run through a lot of time. Briefly, there are certain factors which are taken into consideration: one is the expenditure incurred by the patentee and the time during which the patent has been in force, and secondly, the importance of the invention and the commercial utility. These are some of the factors which the Controller takes into consideration.

Shri Arjun Arora: Does the industry also do the same?

Shri S. V. Divecha: This matter arises before the Controller and the Industry pursues it so that the industry also does in the same way.

Shri Arjun Arora: I may now refer to page 7 of the same memorandum where you deal with a case of basic drugs and products. You say that the cost of basic drugs is usually higher in India than in other developed countries and the cost of finished preparations is in most cases much less than the domestic prices of similar products in foreign countries. How does the industry in India achieve this miracle? Is it by adding some more sugar?

Shri Modi: It was already discussed this morning. Sales promotion expenses in India are eight to nine per cent compared to 25 per cent in other countries.

Shri Arjun Arora: It is said that though the basic drugs are costlier in India, the finished products are cheaper than in other countries. Is it by merely having lesser expenses on sales promotion?

Shri S. V. Divecha: May I invite the attention of the hon. Members to appendix II of our supplementary memorandum which explains in detail the reasons why the cost of basic drugs is high in India?

Shri Arjun Arora: How do you achieve this miracle of making these finished products cheaper?

Dr. M. M. S. Siddhu: The question is, how are you able to bring out this miracle, namely, while the cost of basic drugs is high, the retail price paid by the customer is cheaper.

Mr. J. Reece: The process is quite simple. In the first instance, the cost of the active ingredient is normally a small part of the total cost of the drug, and we have in the supplementary memorandum quoted the cost penicillin where the active ingredient is four per cent of the cost of the drug and the drug is sold to the consumer at 62 per cent. So, even if you double the penicillin cost, you are not substantially adding to the total cost of the drug. If you go through the whole list of drugs, you will find they are generally cheaper in India than in other countries. I am relying entirely on the report of the Development Council 1962-63. After making a thorough study, they say that ingredients and packing material account for 40 per cent of the cost; promotion expenses come 9 per cent but it is undoubtedly higher in other countries. Administration and distribution cost come to

15 per cent; again they are higher in other countries. Profit they have given as 16 per cent and possibly it is higher in other countries. The retailer's margin in India is given as 20 per cent, but to my knowledge no chemist in England takes less than 33-1/3 per cent and in Germany they take over 40 per cent. In these various ways the elements of the costs are lower here, than in other countries.

The statements that the pharmaceutical industry is making 900 per cent profit and so on arise from the simple misconception whereby somebody takes the price of the actual active ingredients and compares it with the price which the customer pays. They forget everything in between.

Shri Arjun Arora: Your objection to clause 5 is that it is discriminatory in character because in respect of medicine the patent can be only for the process and not for the substance. Will you be satisfied if this condition is applied to all industries and not merely to drugs?

Shri S. V. Divecha: If we get the same treatment as other industries, we are satisfied.

Shri Arjun Arora: If others do not get it and you also do not get it, will you be satisfied?

Mr. Chairman: It is a hypothetical question.

Shri Arjun Arora: We have given them 10 years and others 14 years. If we say it will be 10 years for everybody will they be satisfied?

Dr. H. R. Nanji: We have said that we would prefer to have 14 years. But if the committee says it is impossible, as a very poor alternative we would agree to have 10 years provided we have a provision for extension.

Shri Arjun Arora: There are so many opinions about the date from which this period of 10 years or 14

years should be counted. What is your view?

Dr. H. R. Nanji: There is an indefinite period between the application for a patent and the grant of a patent. To do away with this indefiniteness, it would be better if the period is counted from the date of the grant of the patent.

Shri Arjun Arora: Do you want the period of 10 years to begin from the date the patent is granted in India or from the date on which the patent is granted anywhere in the world?

Mr. Chairman: We are only concerned with our patents; the question is not relevant and I rule it out. I rule it out of order.

Shri Arjun Arora: I want my question to be noted. My question is this. Do the witnesses agree that the patent protection should begin from the date on which patents for a particular process or product is granted anywhere in the world?

Shri R. P. Sinha: How is it possible...

Mr. Chairman: They are not concerned with anywhere in the world. You ask whether you want it from the date of application or the date of sealing.

Shri Arjun Arora: I will not ask what you want to ask; that you can do yourself better than I do. I am asking you to revise your ruling. Let me put my case like this. Supposing a particular product is patented in England in the year 1960 and its patent is likely to expire there in England (*Interruption*). It appears people have got their firm opinion in the matter. I have my own opinion.

Mr. Chairman: We do not object to your forming your own opinion. I have ruled out your question. If you want to put any other question you may do so.

Shri Arjun Arora: If you do not want me to proceed, I will go out. I have finished. I walk out in protest.

Mr. Chairman: I have given you more than an hour. We wanted to continue with these gentlemen only for half-an-hour. The other witnesses are waiting.

(Shri Arjun Arora then left the Committee Room).

Shri A. T. Sarma: Why is it that the prices in India are higher than those in Pakistan as far as medicines are concerned?

Shri Modi: It would be difficult for us to answer. Unless we know all the conditions in Pakistan, the customs duties there, whether the licences are free, whether packing material is allowed to be imported and so on, we will not be able to answer.

Shri A. T. Sarma: Medicine is the product of the work of expert scientists. Therefore, it is expected to be true and everlasting. Why is it that medicine loses its efficacy or popularity within, say, ten years?

Shri Modi: It is a question of advancement. New drugs are coming in and there is improvement.

Mr. J. Reece: The hon. Member is right that science is a search for truth, but we have not reached the ultimate truth in the field of medicine as yet and we are still searching for the final truth.

Shri A. T. Sarma: Therefore, do you agree that these are not final products of science?

Mr. J. Reece: There will be improvement on almost all drugs available today. But they are the best available today.

Shri A. T. Sarma: Do you conduct research work on indigenous drugs?

Dr. S. L. Mukherjee: A lot of Indian pharmaceutical manufacturers carry on research work on Indian drugs. To my knowledge, CIBA is doing very extensive research work. Bengal chemicals and others are also doing a certain amount of research work on indigenous drugs.

Shri A. T. Sarma: A number of Indian drugs have been incorporated in the British pharmacopoeia. Do you want that they should be patented in India?

Shri Modi: I do not think that all the drugs in a pharmacopoeia are necessarily patented drugs.

Shri A. T. Sarma: The Bengal Chemicals have produced certain drugs but they have not patented them. Should they not do so?

Shri Modi: In this country, so far we have taken product and process patent, not process *per se* patent. The method of extracting the ingredients are there. Therefore, those products may not be patented.

Dr. S. L. Mukherjee: Besides, Indian drugs are known and associated with therapeutic drugs. We are only developing. If through our own research we find out something like Reserpin from *sarpagandha*, certainly that has to be patented, and people have taken patents for such things.

Dr. H. K. Nanji: It is not only that research is done in a number of laboratories on vegetable drugs, but a number of our members have started having extensive cultivation of vegetable drugs.

Shri R. P. Sinha: Kindly refer to Appendix I of your Supplementary Memorandum which deals with production of basic drugs in the year 1964. The popular feeling in this Committee, and outside also, is that we are not manufacturing all the drugs, particularly from the basic stage, that we use in India. You have mentioned some of the basic drugs

that are being manufactured in India. This would give an idea whether all our requirements of basic drugs are being manufactured in India. They have also given us their chart where they show the production of drugs in this country. The production has been steadily increasing and we appreciate that. The point is whether we are making all the drugs that we require in this country. We are told that there are 900 drugs in use. What percentage of that is being manufactured in India and what percentage is being imported? Secondly, we are told that the drugs that are being manufactured in India are from an advanced stage and not from the basic stage. Our companies, particularly foreign firms, are only packing, tableting and processing the formulations for actual doses. So, what are your plans for manufacturing medicines in this country? There is another related question. We are told that most of you have got a large number of patents in your names in this country but you are working only on a few of them. There are cases where out of 70 or 60 patents taken only 2 or 3 are being worked. Therefore, the allegation is that you are taking the protection of our patent laws to import products and not to manufacture them here.

Dr. H. R. Nanji: First of all, the cost of import of drugs for the last three or four years is of the order of Rs. 9 crores and the total quantum of production of pharmaceuticals in India is roughly of the order of Rs. 140 crores. So, it is not at all correct to say that a large portion is imported.

Shri R. P. Sinha: Rs. 175 crores includes your processing cost which is very much higher than the cost of active ingredients. So, the point that is urged is that what all the pharmaceutical companies are doing is importing basic drugs, formulating them, making them into tablets, packing them and selling them. Therefore, we are interested in seeing that these drugs are manufactured in India. A chart has been circulated to us by the

Lok Sabha Secretariat which gives the number of drugs that are being imported and the number of drugs that are being manufactured in India. Why is it that so many drugs are being imported instead of being manufactured here?

Mr. J. Reece: The answer to this question is the industrial licensing provision. You cannot just decide to manufacture a drug here. You have to submit your application to the DGTD, the Ministry of Industry. Then they will make enquiries whether we have the capacity to do this, to do that and so on and so forth. We cannot just simply manufacture a drug in India. There are many reasons known to them why drugs cannot and are not manufactured in India.

Shri R. P. Sinha: The Health Ministry comes and tells us in the Committee that these gentlemen are not manufacturing these drugs even though they have the patent rights for them. So unless in respect of each item you say why you could not manufacture them here, this prejudice cannot be removed from our minds. Secondly, how many of these items are patented and how many not patented? We are told by other witnesses that unless we weaken the patent law it will not be possible for India to manufacture them. Suppose we weaken or abrogate the patent law, is it possible to manufacture all the drugs in India?

Mr. J. Reece: My answer to that would be "no". Merely having access to the actual patent is no guarantee that one can manufacture the product.

Shri R. P. Sinha: Why are you not manufacturing them?

Mr. J. Reece: We are manufacturing as many drugs as we are being allowed to. I hope, we would be allowed to manufacture them.

Shri R. P. Sinha: How many of them are you not being allowed to manufacture?

Mr. J. Reece: I cannot give that information.

Shri R. P. Sinha: Will you send us a complete note on this subject?

Mr. Chairman: Are there drug control or any other restrictions because of which you cannot manufacture them?

Mr. J. Reece: There are two large factories coming up—one in Rishikesh and another in Hyderabad—in the Government sector and no licences are being given for the drugs that are proposed to be made in those factories.

Mr. Chairman: We have another set of witnesses who have made their air bookings for the return journey. So, we will break here. We will try to finish the other party and then call you at about 5 o'clock. We may have to sit up to 8 o'clock; otherwise, you will have to come again some other day.

Dr. H. R. Nanji: We are prepared to sit and finish it today.

Mr. Chairman: Then, please wait for about half an hour.

(The witnesses were asked to withdraw and to wait)

II. Indian Chemical Manufacturers' Association, Bombay

Spokesmen:

- (1) Shri J. H. Doshi
- (2) Shri P. D. Nargolwala
- (3) Dr. K. Subramanyam.

(The witnesses were called in and they took their seats).

Mr. Chairman: Gentlemen, the evidence that you give is public. It will be printed and distributed to all the members of the Committee and of Parliament. Even if you want any particular portion to be treated

as confidential, it will be printed and given to our Members.

We have received your memorandum and it has been circulated to all the Members. If you want to stress any point or want to make out any new point, you may do so; otherwise, our Members may ask you some questions.

Shri J. H. Doshi: We do not have to make any new point beyond what we have mentioned in our memorandum. We are happy at the contents of the draft Bill because in broad outline it covered all the points that we had made out in our old memorandum presented in 1963 after Justice Ayyangar's Report. We had at that time made out three broad points, namely, that the life of the patent should be only ten years, that only the process should be patented and not the product and that compulsory licensing should be made much easier. All the three points are covered by this Bill.

We have also in the present memorandum covered some of the other clauses, ten or twelve of them, and have given our comments. It is only a question of amending them except one clause whose deletion we have suggested—I think, that is clause 87—because it is already covered by clauses 86 and 88, particularly by clause 86.

If any hon. Member wants further explanation of any of our comments or wants to put us a question, we are ready to answer.

Shrimati Sharda Mukerjee: One of the points you have stressed is that the life of patents should be ten years and one of the things that have been brought up here is that the life of the patent should be extended because the cost of research etc. is so heavy that it would not pay otherwise. What is your reaction to that?

Shri J. H. Doshi: We have said that ten years should be from the

date of sealing of the patent and not from the date of acceptance of specifications. We think that the present progress of technology is so fast and the period of obsolescence so short that ten years is a sufficiently long time.

Mr. Chairman: For other than foods and drugs, it is 14 years.

Shri J. H. Doshi: You have mentioned 14 years.

Mr. Chairman: You have no objection to that?

Shri J. H. Doshi: We have not commented on that. Ours is a chemical manufacturers association. We have commented on the section pertaining to foods, drugs, pharmaceuticals and chemical processes. 14 years period applies to engineering goods on which we have not commented.

Shrimati Sharda Mukerjee: What do you mean by saying that compulsory licensing should be made easier?

Shri J. H. Doshi: That is covered here. We had mentioned it in our Memorandum submitted in 1963 and all the three points which we covered then are covered in the present draft Bill. In between, there were suggestions about complete abrogation of patents. The Cabinet Sub-Committee suggested 7 years. Finally, your draft Bill has come back to the terms suggested by us. So, we can rightly take pride in this matter that you have accepted our suggestions.

Shrimati Sharda Mukerjee: Do you think we have the necessary technological and industrial base to even manage without the assistance of these big people who come here?

Shri J. H. Doshi: I do not think it in any way prevents any manufacturer from coming here. On the other hand, the idea is to force them to start manufacturing here. If that

purpose of the Bill is served, this question does not need to be answered.

Shrimati Sharda Mukerjee: Supposing they get better terms outside, do you think this will deter them from coming here?

Shri J. H. Doshi: I do not think any reputable manufacturer can ignore the market of a country like India.

Shri Sham Lal Saraf: For our chemicals and these drugs that you manufacture here, particularly that come under patents for which the validity period is being fixed, will it be possible for our country, with the talent that we have at our disposal, to go the whole hog with our manufacturing programme of producing new processes without taking into consideration what is happening elsewhere? Let me clarify it a little more. Knowing as we do that the know-how within the country is far far less than it is available elsewhere and, secondly, the capital is also needed to be imported into the country, keeping both these angles in view, do you consider that our patent system will be successful when in other countries, the validity period for a patent which is being fixed here is more than what is being envisaged in the Bill?

Shri J. H. Doshi: I have already answered this. I entirely agree with the hon. Member that our technology and know-how is not sufficiently progressed to do everything ourselves. We do need their assistance; we do need their help and we do need their know-how. But, as I said, the Bill is not of a preventive nature. The Bill suggests that the people who want to register their patents here should take early steps to start production of their products in this country.

Shri Sham Lal Saraf: You have not caught my point. My point is that the validity period of those very

patents registered elsewhere in the world is much more, that is, 14 years to 16 years or even a little more. Will it be a sufficient incentive for them to come and work in this country or to invest, if necessary, in the manufacture of chemicals and pharmaceuticals here?

Shri J. H. Doshi: For a while they may not come. But that is my opinion. As I said, how can a reputable manufacturer having a foothold in all the countries of the world afford to ignore a country like India?

Shri Sham Lal Saraf: That is again a matter of opinion. In actual practice, there are other considerations also. Anyway, I come to another question. There are different stages of research, the fundamental research, the basic research and the applied research. Are we fully equipped for it from technological point of view? Then, I will come to the point of view of management.

Shri J. H. Doshi: No.

Shri Sham Lal Saraf: In doing fundamental research in drugs, particularly the life-saving drugs, we know and we see that elsewhere in the world, in the bigger countries and industrialised countries, much more effort is put in in order to arrive at new inventions and new things that can be patented.

Shri J. H. Doshi: We are not equipped. In the research field we have not progressed in a comparable manner as the Western and highly industrialised countries have. We must admit that. Therefore, we want them to come here; we want them to put their industries here and to start the manufacture here. 10 years time is sufficiently long under the present conditions of rapid technological progress and the shorter period of obsolescence.

Shri Sham Lal Saraf: Don't you think these are two separate questions, one of the validity period of

patent and the other of making it possible for them to manufacture drugs in this country? Can't there be other provisions introduced in the Bill that will enable us to get as much know-how as possible provided they get sufficient incentive to come with their know-how and also with their capital in case capital is needed?

Shri J. H. Doshi: There are other financial incentives which may be considered.

Shrimati Sharda Mukerjee: You mean royalty?

Shri J. H. Doshi: Royalty or tax relief or tax holiday or the guarantee against nationalisation.

Shri Sham Lal Saraf: So, it is conditional.

Shri J. H. Doshi: If the Committee feels that way, a provision for further extension of the patent life by another four years may be made at the discretion of the Registrar so that they always have a temptation that in case of necessity, the life of the patent will be extended by a further period of four years.

Shri Sham Lal Saraf: There is a network of research laboratories in the country known as national laboratories. The Drugs Research Laboratory has also been set up. May I know, firstly, as to what extent they have been able to make some progress particularly in the fundamental research and the basic research and, secondly, whether there is some proper link established between the research organisations and the manufacturing organisations so that we work out easily the actual manufacturing processes?

Shri J. H. Doshi: Much progress has not been achieved yet. It will take time. Research is a tradition. You have to build a tradition. You should make your chemist or scientist research-minded. They must be watchful. They must know how to

notice the effects of a certain reaction. Although a reaction may take place and they may not notice it. It requires time. As I said earlier, it is a matter of tradition which we have to build up gradually. It will take its own time.

Shri Sham Lal Saraf: My point was specific. There are the laboratories set up by the Government. I too had something to do with some laboratories.

Mr. Chairman: Is there any liaison?

Shri J. H. Doshi: I have not come to the second question.

Shri Sham Lal Saraf: The first question was whether the drug laboratories set up by Government have established some inventive processes.

Shri J. H. Doshi: They have established processes but have not achieved much progress. About the second question, the liaison between research laboratories and the industry is now being established. The process has just started in the beginning of this year when CSIR arranged a seminar or conference here in January. Liaison centres are being set up. A centre in Bombay between our Association and the CSIR has been set up. The chemists from CSIR come to Bombay and meet the members of our Association who are all industrialists and discuss the problems with them. This process has just commenced. Up till now, there was a barrier between the CSIR and the industry and there were a lot of hostilities, but now this barrier is gradually being broken up.

Shri Sham Lal Saraf: The proper link has yet to be established?

Shri J. H. Doshi: As I said, it is in the process of being established.

Shri Sham Lal Saraf: With regard to price factors, this morning we got certain papers in which certain

things have been made out. The prices at which drugs and chemicals are available in this country are lower, in most of the cases, when compared to the prices of drugs in America or the United Kingdom. But when compared to Pakistan, our prices are higher. Your Association being such a prominent Association, some of your manufacturers might have their branches in Pakistan also. Is ICI a member of your Association?

Shri J. H. Doshi: Some of the sections of the ICI are our members.

Shri Sham Lal Saraf: Could you throw some light to enlighten us as to why there is such a gap between the prices in this country and those in Pakistan?

Shri J. H. Doshi: That is a question which requires investigation. But I agree that the prices in U.K., United States and some other countries are even higher—I am referring to drugs—than the prices in this country. At the same time in other countries they are lower also. That depends on the patent position. In countries like Italy, the prices of some items may be higher and those of others may be lower. There are a number of factors affecting the price structure.

Shri Sham Lal Saraf: My question is specific. Some members of your association have manufacturing organisations in Pakistan also. Could you tell us, if not now, at least some time later, why the prices in Pakistan are lower—and in certain cases much lower—than our prices?

Shri J. H. Doshi: Will it be possible for you to name the product? We do not think that the ICI have any manufacturing unit in Pakistan to the best of our information.

Shri Sham Lal Saraf: Some of the firms like Hoechst may have..

Mr. Chairman: There are so many factors—tax structure, restrictions, etc. They have no idea.

Shri Sham Lal Saraf: Some of their members have branches in Pakistan also. So let them find out. They will be helping the Committee by that way.

Shri J. H. Doshi: I can find out if names of same products are given to us.

Mr. Chairman: You can find out why the costs of drugs in Pakistan are cheaper than in India.

Shri K. V. Venkatachalam: Here is a statement giving the comparative prices in India and Pakistan. It contains a number of drugs. You can select half a dozen from that list and find out.

Shri J. H. Doshi: It is understandable because Pakistan has no drugs industry. They are importing from all countries of the world. In any importing country, the price structure is lower than that in the country where it is manufactured. Since we started manufacturing, our economy has become an expensive economy, a high cost economy. When we were importing, our price structure was also lower than at present because we could import from Italy, Japan, etc.

Shri Borkar: This list contains some drugs which are imported in India also. The ICI imports them here. There should be some parity in prices.

Shri J. H. Doshi: If it is a comparison of only imported products, the prices should be comparable.

Shri Sham Lal Saraf: We cannot say from the list what is imported and what is not.

Shri J. H. Doshi: We shall find out.

Shri Sham Lal Saraf: It will help the Committee if the hon. witness would kindly get us this information.

Mr. Chairman: You have a copy of the list. You may get us the information if you can.

Shri Kashi Ram Gupta: In the previous Act there was a time limit for sealing, i.e., from the date of application to the date of sealing, the maximum limit was 2 years and 3 months. The present Bill has not got such a provision. Are you of the opinion that there must be a provision, as was there in the previous Act, limiting the time of sealing from the date of application to the sealing of the patent.

Shri J. H. Doshi: It is desirable to have such a ceiling.

Shri Kashi Ram Gupta: I wanted your opinion. There is no provision in the present Bill.

Shri J. H. Doshi: I say that it is desirable to have a provision.

Shri Kashi Ram Gupta: The present Bill provides for a maximum of 4 per cent or royalty. Are you agreeable to this?

Shri J. H. Doshi: We have not commented on that, but we think that it should be more flexible. It is 4 per cent free of tax, which normally would come to 8 per cent.

Shri K. V. Venkatachalam: Not tax free. It is 4 per cent subject to tax.

Shri J. H. Doshi: Although we have not commented on this, we believe that it should be more flexible with a certain ceiling. We may put a ceiling of 8 per cent. But it should be fixed by the Registrar or the Government of India depending on the utility of the product. But we should not fix a certain percentage.

Shri Kashi Ram Gupta: When you say 8 per cent you want a maximum of 8 per cent?

Shri J. H. Doshi: Yes, subject to tax.

Shri Kashi Ram Gupta: The legislation can be only upto 8 per cent Is that your idea?

Shri J. H. Doshi: It can be 4 per cent or 5 per cent or 6 per cent, but upto 8 per cent.

Dr. M. M. S. Siddhu: What is the position of our country in regard to the production of basic fine chemicals? How much progress we have achieved and what are the likely prospects because if there is any hardship, the foreign collaborators may not be forthcoming and we may be isolated.

Shri J. H. Doshi: I do not think that we have made much progress in basic fine chemicals.

Dr. M. M. S. Siddhu: In that case, how are you going to base our chemical industry?

Shri J. H. Doshi: We have to import it for the time being.

Dr. M. M. S. Siddhu: What do you think should be done for a fine chemical in our country?

Shri J. H. Doshi: So many schemes have been thought of and promoted, but unfortunately progress has not been achieved. For instance, take the Hindustan Organic Chemicals; even the base of buildings have not come up; it is a government-sponsored project.

Shri Bade: You have said that clause 87 should be deleted. This has been put in looking to the peculiar circumstances in the country. Clause 86 says that the Central Government will apply to the Controller three years after the sealing of a patent to have the compulsory licences. If you say that clause 87 should be deleted, you do not make a difference between patent in the drugs and medicines and patent of other things. Am I right?

Shri J. H. Doshi: The answer is this. This clause says that the Controller

shall grant permission to any person to work the invention. It means that the Controller has no option. He has to grant permission whether the person asking for compulsory licence is qualified technically or financially for it or not....

Shri Bade: My point is that there is a difference between clauses 86 and 87. Under clause 86 the Central Government will move the Controller three years after the sealing. Under clause 87 those patentees regarding drugs and medicines will be deemed to be licensees of right as soon as they apply. We do not want the foreigners who have the monopoly in these things to take advantage of our poor people.

Shri J. H. Doshi: As far as Government is concerned, they have the power under other sections too. As far as private parties are concerned, they have to wait for three years. You must give some protection to the patentee. After all three years is not a long time. Even otherwise without the know-how it is very difficult to manufacture it.

Shri Bade: Those who have already got it should continue. According to clause 87 they will be deemed to be licensees of right.

Shri J. H. Doshi: They must have been already working for three years.

Shri Bade: Sometimes they may not.

Shri J. H. Doshi: Three years time is reasonable.

Shri Bade: Not that Government should apply to the Controller every time.

Shri J. H. Doshi: Otherwise we shall be washing out the purpose of the Bill. Clause 87 is as good as abrogation. We have tried to compromise so that we do not earn a bad name in the country. If you put in clause 87, it is as good as abrogation.

Shri Bade: There is no royalty.

Shri J. H. Doshi: 87 does not cover royalty. 88 covers royalty.

Shri Bade: If you read 88, you will see that four percent royalty will be given. In 86 Government will apply to the Controller.

Shri J. H. Doshi: Clause 87 is as good as abrogation. It can be slightly amended. But we are definitely against 87.

श्री चोरडिया : पेटेंट की अग्रधि कम रहे यह जो सुझाव है यह इसलिए दिया गया प्रतीत होता है कि ताकि दूसरे लोग भी उन चीजों को बना सकें इमीटेट कर सकें। आप देखें कि बहुत सीमैडीसिस ऐसी हैं जिनका पेटेंट पीरियड समाप्त हो चुका है किन्तु हमारे निर्माता लोग उनका निर्माण अभी तक भी नहीं कर पाए हैं। अगर पेटेंट की विधि कम रहेगी तो उसका फल यह होगा कि एक तो वे लोग रिसर्च पर अधिक खर्च नहीं कर सकेंगे और दूसरी ओर हमारे यहां के निर्माता उनका निर्माण नहीं कर पायेंगे। ऐसी अवस्था में जो बीमार लोग हैं उनकी जो स्थिति है उसका हल किस प्रकार निकल सकता है ?

Shri J. H. Doshi: I won't be able to reply in Hindi, though I have understood the question. If they do not start manufacturing here, we have to import them for our sick people. Imports are not forbidden. If we are not able to manufacture it till the valid period is over, we will have to import.

Shri V. M. Chordia: In India many medicines are not manufactured even though their ten year period is over. This will hamper the research. How will you balance the two? They do not have the know-how.

Shri J. H. Doshi: Know-how is quite another thing. Process is different from know-how. After the expiration of the patent you may have the process, but not the know-how. We are

seeking collaboration for the know-how even for designs and processes which have expired 25 or 30 years ago. We can never believe that after the expiry of ten years we will be able to make everything. We will have to develop our know-how in every case. Till such time we will have to import.

Shri V. M. Chordia: How will you encourage people who want to do research?

Shri J. H. Doshi: There are other incentives. For instance, tax relief.

Shri V. M. Chordia: Tax relief is already given.

Shri J. H. Doshi: That is nominal. It is nothing substantial.

Mr. Chairman: After the patent lapses, anybody is free to develop know-how?

Shri J. H. Doshi: Developing know-how is different. Anybody can have the process. How to convert the process into a commercial product? That is know-how. It takes years.

Mr. Chairman: It has not happened?

Shri J. H. Doshi: Even in respect of processes which have expired 25 years ago we are not able to reproduce in our pilot plants. That is something different.

Shri B. K. Das: You say that clause 48 gives the Government unlimited powers, without processes of law or due compensation. How do you like it to be improved?

Shri J. H. Doshi: The Association suggest that Government should resort to this clause only in those cases where the patent is not worked out in this country to manufacture drugs in sufficient quantity to meet the requirements of the country and at reasonable prices.

Shri B. K. Das: In clause 48, it is provided that Government may import for its own use in case there is

an epidemic as well as for defence purposes.

Shri J. H. Doshi: For defence and for epidemic, we have no objection. We have made exceptions too. Under normal conditions, unless the party holding the patent is not prepared to manufacture and sell at reasonable prices and to meet the requirements, the Government should not start importing them. By so doing that it will be cheaper, you will be killing all the incentives to manufacturers to come here.

Shri B. K. Das: Then, under what circumstances Government can utilise that power?

Shri J. H. Doshi: For defence and epidemic cases only. Or under such circumstances if it is being produced but cannot be stepped up quickly, then they can import.

Shri B. K. Das: Speaking about compensation, should it not be given? Here compensation is not provided for.

Shri J. H. Doshi: In that case too, compensation should be given to the patentee. That is in case of defence and epidemics too.

Shri B. K. Das: In all such cases, if it is for government's use, compensation ought to be provided for?

Shri J. H. Doshi: Yes, Sir.

Shri B. K. Das: Can you give me any idea as to on what basis compensation is to be paid?

Shri J. H. Doshi: I think it is 4 per cent free of income tax. But, now, as the wording goes, that excludes all taxes current in the country. If it is 4 per cent subject to taxes, then our limit for that is 8 per cent.

Shri B. K. Das: You will be satisfied if 8 per cent compensation is provided for.

Shri J. H. Doshi: Yes, Sir.

(The witnesses then withdrew and the representatives of the Organiza-

tion of Pharmaceutical Producers of India, Bombay were called in again.)

(These witnesses reappeared and they took their seats).

Shri R. P. Sinha: The point is that I have not got the answers to my question which I put to the witness before. I made a point that there are a number of companies holding a large number of patents and that they are not making use of them. Now, I have got a note prepared by the Ministry and got it circulated to all of us. It says:

The products for which the processes are patented and are being exploited in India are only a few as mentioned below; they are a large number in the list. I may read only one or two.

CIBA:

This firm is holding a large number of patents in India but to the best of our knowledge, they are manufacturing some hormones and some sulpha drugs.

GLAXO:

This firm is also holding a large number of patents in India. But, to the best of our knowledge, they are exploiting only one or two Vitamin tablets. (A)

Hoechst:

This firm's representative is also here; they are holding many patents in India but are exploiting only one. They are doing Tolbutamide.

Parke Davis:

This is a wellknown American firm holding a large number of patents but are exploiting only a few. They are manufacturing Tetracycline.

May & Baker:

They are holding several patents but are manufacturing only chloro-procaine and some sulpha drugs.

Merck Sharp:

This firm is holding a number of patents in India but they are manufacturing only Vitamin B-12.

There is another American Company which is holding 93 patents. They are manufacturing only a few. Like this, there are a number of companies having a number of patents but they are manufacturing only three or four. The note further says that there are a number of companies mentioned therein with and without foreign collaboration who are manufacturing 1,933 pharmaceutical formulas under their own registered proprietary trade names. These foreign companies in India and the foreign firms abroad are surely holding innumerable patents for various specific products and processes. To the best of our information, all of them are having patented formulas in India. This is a very serious charge against the pharmaceutical industry in India. Although you said that their production has increased from ten to twenty fold, we are told that they are not producing the basic things. This is number 1.

Charge Number (2) is that you are holding a large number of patents here but exploiting a few. Therefore, if we weaken the Patent Law, probably others will also exploit them or you will be compelled to take them up.

Dr. H. R. Nanji: The first question I would like to ask the Health Ministry is: certain targets have been fixed by the Development Council for the Fourth Plan and how many of these patented drugs are included for manufacture in that Plan? We have got the targets ready for the Fourth Plan and we would like to know as to how many are included there. If they are not included, that means that their demand is very small and nobody would like to produce them.

Shri R. P. Sinha: You are putting a question to a question. That is not

a correct reply. Our minds will not be properly changed on that basis. You have got to explain this point, these allegations against the pharmaceutical industry in India.

Dr. H. R. Nanji: We shall send you a detailed reply after taking into consideration all these points. But we cannot give the answer here.

Shri R. P. Sinha: I want this answer. This is a point which has not been covered in your two memoranda. You have said very general things in your memoranda.

Dr. H. R. Nanji: This also we would like to know—it is said that many firms are holding so many patents which they are not exploiting. Who are they? We would like to have this information from Govt. records.

Shri R. P. Sinha: Is it not a fact that CIBA is holding so many patents? How many patents they are holding and how many they are exploiting and how many they are not exploiting? If not, why?

Mr. J. Reece: The charge that my company manufactures only two products and imports the other patented products is not correct. Some of these, viz., cortisone, hydrocortisone, Plednisolone acetate, etc. are manufactured. Secondly the manufacture of a product depends upon its demand in the country. The charge that we are holding back their manufacture in this country for reasons best known to ourselves is not a valid charge. That is why I would welcome an opportunity and I am sure every company would welcome the opportunity to take this statement and give full details.

Shri K. V. Venkatachalam: I think if you could put the question differently they will be able to answer.

Mr. J. Reece: May I say that the implication against my company that we are importing all our drugs is not correct. Our import Bill comes to

only 7% of the materials used and most of our raw materials are available here.

Shri K. V. Venkatachalam: If patented drugs are imported and are not manufactured in this country, why should they not be manufactured in the country? They are manufacturing certain drugs in this country and certain drugs are also imported in the finished form. Why are the latter not being manufactured in this country?

Dr. H. R. Nanji: The list you have given us is a long list. The first observation I would like to make is: it does not give a complete picture for this reason. Quite a number of items included in this list have recently been licensed by the Government for manufacture in this country. In some cases applications for licences are pending before the Government and I will read out those from this list.

Erythromycin—licence is pending for the last 2 years. Insulin is already being manufactured by Boots. Tolbutamide-Hoescht has got a licence and their capacity is 40 tonnes. There is not the slightest need for importing this small quantity. The quantity imported is 1½ tonnes. They can very well make that quantity. They made only 12 tonnes.

Shri K. V. Venkatachalam: Why have they not made more?

Dr. H. R. Nanji: There are limitations of import licence in certain cases. That is why it is not manufactured upto the licensed capacity.

Then we go to Chlorpropamide—Pfizer have already set up a factory and they will be soon going into production.

Lastly Chlorpromazine—May & Baker has been licensed and they are going to manufacture this drug. I think in fairness this allegation is not correct.

Mr. Chairman: You may give a statement giving the true facts and it will be circulated to our members.

Dr. H. R. Nanji: We will send a detailed note.

Phenyl Butazone—Suhrid Geigy has got a licence.

The second point is: the items included in this list are all items, the demand for which is very small and no manufacturer would think of going into production of small quantities.

Shri Bade: Why do you hold thousands of patents and thereby block the way of others?

Dr. H. R. Nanji: Anybody can ask for compulsory licence. The original charge was that these are being imported and not being manufactured here. Regarding that we shall send you a detailed statement giving the exact position and I would also suggest that you may verify what we say from the D.G.T.D.

Shri R. P. Sinha: What about other companies—Hoescht and Merck Sharp & Dohme?

Mr. Keith C. Roy: The position as regards Merck Sharp & Dohme is—although it does not appear on the list there—in so far as our manufacturing capacity of Vitamin B12 is concerned, we were licensed under the Industries (Development and Regulation) Act to manufacture 30 kg per year which were the full requirements of the country as determined in consultation with the then Development Wing. The target for the Fourth Five Year Plan has been put at 60 kg and we have an application pending with the Ministry of Industry for over 2 years, requesting that we may be allowed to increase our capacity to meet this requirement. As of to-day, no orders have been passed on that case.

In so far as other patents which we hold are concerned, the position is, as Dr. Nanji has indicated, that it is not correct to say that we are blocking the progress of others who wish to exploit those patents. As we have tried to show in the case of process patents you have necessarily, as the law now stands, to take a number of processes and patent them; and out of them perhaps one or two processes may prove to be commercially exploitable. The other processes which are indeed covered by patents are not exploited commercially because they are not economic processes. But, as we have stated, there is nothing whatever to prevent any other person coming and applying for a compulsory licence for those processes and exploiting them, processes which we consider to be uneconomic.

Shri R. P. Sinha: How many of the patents that you are holding are being commercially exploited and how many are not exploited and why they are not being exploited?

Mr. Keith C. Roy: I regret I can't give you that answer straightway. I will certainly obtain it and send it to you.

Shri S. V. Divecha: So far as my company is concerned, we don't hold any patents in India, but our foreign collaborators are holding some patents in India. I don't have any details as to the number of patents which they hold in India and the number they work. I shall try to find that out from them, but in so far as my company is concerned, I can say that we are manufacturing four patented products in our factory in Greater Bombay.

Shri R. P. Sinha: Regarding the statement about this Rs. 9 crore worth of imports that you are making of the basic drugs, will it be possible for you to give us an idea about your plans for making them in India and about what is standing in your way, whether it is due to Government

regulations or that they are required in very small quantities?

Dr. H. R. Nanji: Quite a large proportion of this Rs. 9 crores is made up of intermediates which are required for the manufacture of drugs and these intermediates at present could not be manufactured in India because the basic chemical industry does not exist. We still don't have even a simple thing like phenol. We had been promised that the Hindustan Organic Chemicals will go into production five years ago. It still has not started making a single product and that is the reason why we are obliged to import this quantum of Rs. 9 crores. But there has been a constant reduction in the quantum of imports during the last ten years.

Shri R. P. Sinha: I draw your attention to your supplementary memorandum dealing with profitability. I also draw your attention to another note which I got sent this morning by the Lok Sabha Secretariat to you, in which a statement showing the remittances of profits made by certain pharmaceutical companies during the period April 1963 to March 1966 is given. The names of the different companies are also given. It is very difficult for me now to find out as to how these figures of remittances are to be related either to your net worth or to the capital employed by these companies. Now, in order to find out whether these companies are making unreasonably high profits or they are making reasonable profits, I must relate them to the percentage of your capital employed or your net worth. Will you help me in furnishing the figures for the companies mentioned in this statement so that I might arrive at correct figures?

Mr. Keith C. Roy: Mr. Chairman and Hon'ble Members, these figures were mentioned to me very informally and naturally I have not got all the data here with me, but I can say quite categorically that in respect of Merck, Sharpe and Dohme, the figures shown are totally incorrect.

Shri R. P. Sinha: Are you aware that these figures have been given by the Reserve Bank?

Mr. Keith C. Roy: No, Sir.

Shri R. P. Sinha: If you refer to the first page, you will find that they have been given by the Reserve Bank.

Mr. Keith C. Roy: May I first of all make a statement that in respect of Merck, Sharpe & Dohme, these figures are absolutely incorrect? Whether they have been furnished by the Reserve Bank or not, I can't say but it is stated here....

Shri R. P. Sinha: Can you give me the correct figures?

Mr. Keith C. Roy: Yes, Sir. First of all, if I may take, as I can only take, the case of my own firm, Merck, Sharpe and Dohme, it says that in 1963 the remittances was 71,209 dollars. Now the first point is I don't know to what period in 1963 the figure relates. Is it the calendar year 1963 or is it the financial year ending 1963? In fact, in the case of my company, it happens that our financial year ends in November and, therefore, it is very difficult for me to say to what exact period these figures relate.

Shri R. P. Sinha: I can only give the figures of remittances furnished by the Reserve Bank. I didn't look into the company's figures. This relates to actual remittances in 1963.

Mr. Keith C. Roy: Yes, Sir, I have tried to check the figures on that basis and, therefore, as regards the figure entered in this statement for 1963, I have assumed that, since our accounting year ends in November 1962, this figure of 1963 in the Reserve Bank statement must relate to the dividend which we remitted for the year ending November 1962, which would be sometime during the year 1963. The figure for 1963 in

the statement is shown as \$ 71,209. In fact, Sir, our remittance for that year was \$ 40,840. The figure, of course, was converted at the old rate of one dollar-Rs. 4.76. I take the figure of 1964 in which the remittance in the Reserve Bank statement is shown as \$ 147,724. I am presuming that this relates to the remittance for our year ending November 1963. The dividend which we remitted was \$ 96,429. Then, Sir, the figure for 1965, which again I presume relates to the dividend which we declared for the year ended November 1964, is shown in this statement as \$ 322,431, whereas in fact, it was \$ 77,143. I would say with respect, Sir, that these figures are totally incorrect. I would also like to make it clear that although in this case, the Reserve Bank states that they have no information regarding the amounts paid to foreign firms under other heads of accounts, namely, royalty and technical know-how, in the case of my company, there can be no doubt whatever that about any other figures being mixed up within these figures, because Merck in India does not pay any amount of royalty, or fees of any other kind to Merck & Company in the United States.

Shri R. P. Sinha: What about Glaxo? Maximum remittance is for Glaxo.

Shri Keith C. Roy: Yes, Sir. I do not know whether these figures are correct or not.

Shri R. P. Sinha: What is the suggestion of the leader of the witnesses? Will he throw some light on it.

Dr. H. R. Nanji: We will check up the accuracy of these figures and give you the true picture very shortly.

Shri Keith C. Roy: May I just try to answer the Hon'ble Member's

question in regard to the request which he made for assistance in trying to elucidate some of the figures which were set out in the Reserve Bank bulletin. I have, Sir, made a fairly close study of the figures both in the November, 1964, and the November 1965 bulletins which contain certain figures relating to the pharmaceutical, chemical and other chemical industries. I would like to state that, first of all, the figures in the 1964 bulletin which relate solely to the chemical industry are quite incomprehensible even to a reasonably intelligent person, if I may say so. Unfortunately, Sir, there are, as I said this morning, three basic concepts against which we must attempt to measure the financial stability of a company. One is the paid up capital, which means the equity capital; the preference capital and any banks shares that might have been issued. The second concept is the net worth of a company. The net worth of a company is a concept of the paid up capital plus reserves plus the surpluses which come forward each year from the profit and loss account. The third concept is the concept of total capital employed. The total capital employed is the paid up capital as in the first instance, plus reserves and the surpluses as in the second definition plus all the provisions for taxation and borrowings. In fact, Sir, the concept of capital employed is the concept of the total monies used in a business, whether they come from the capital raised or whether they come from borrowings. Now, Sir, if I may take one minute of your time and come to the article in the November, 1964, issue, they have used a concept of total capital employed. Now this I have discussed with one of the Deputy Governors of the Reserve Bank and he has clearly admitted to us—my colleague Dr. Nanji was present at that time—that they have not included reserves and borrowings in the concept of total capital employed. Therefore, Sir, when they arrived, in the Nov-

ember 1964 issue, at a figure of 23% as representing the gross profits as a percentage of the total capital employed, they have related that gross profit to a figure which is not a correct concept of the total capital employed. The second point I would like to make, Sir, is this. That in the 1965 issue of Reserve Bank of India Bulletin, strangely enough, there is no figure at all of total capital employed. Yet the same article does produce a percentage, in the same way as the 1964 issue did, of gross profits as a percentage of total capital employed. But no figure of total capital employed has been given in the article. But with all those limitations, Sir, the figure which emerges from the 1965 issue of gross profits as a percentage of total capital employed is only 13.7% against the 23% taken in 1964 bulletin. My submission, Sir, on these figures, is that they have no relevance as reflecting the true state of the industry as a whole. With those limitations, Sir, I still feel that perhaps I can help the Hon'ble Member in arriving at some view as to where the industry stands in regard to certain basic concepts. In this case, I am referring to the article in the November, 1965 Bulletin, recognising the limitations of the definition which have been given.

Table 3 on pages 1694-1695 of the 1965 issue, compares the status of the industrial group called "Medicines and pharmaceutical preparations" in relation to 28 other industrial groups. This is, in fact, an overall survey of 1,333 companies taken by the Reserve Bank; and, out of the figures that emerge from that examination, they have arrived at figures which they call the national average. If I could take two minutes more and then I will finish, I will try to give you some idea of where the pharmaceutical industry stands in this matter. I will just read the relevant figures from Tables 3 and 4 of that article.

The dividends expressed as a percentage of profits before tax in the pharmaceutical industry is 17.2% against the national average of 29.9%. The profits retained in the business, as a percentage of profits before tax, are 20.6% in the case of pharmaceutical industry against the national average of 18.8. In other words, the pharmaceutical industry is ploughing back into the industry more than the national average. The dividends paid as a percentage of profits.... The dividends paid as a percentage of profits after tax is 45.5 per cent against the national average of 61.15 per cent. Again, the dividend distribution is appreciably below the national average, which again reflects itself in the ploughing back of profits into the industry. I would then pass on to Table 4 and give what we consider to be the three main criteria. Now, I have mentioned that net worth is the total capital plus reserves plus surpluses. The profits after tax as a percentage of Net worth in the pharmaceutical industry would come to 12.7 against the national average of 9.32. That is to say, Sir, in the pharmaceutical industry the profits expressed on that basis are somewhat higher than the national average. But I would ask you to bear in mind, Sir, that at the present moment the borrowing rates from any commercial bank are something of the order of 8 to 10 per cent. Dividends expressed as a percentage of net worth, which again is an important indicator, are in the case of pharmaceutical industry 5.8 per cent, against the national average of 5.7 per cent. Again dividends as percentage of paid-up-capital are in the case of pharmaceutical industry 10.4 per cent against the national average of 10.3 per cent. So keeping in view the limitations to which in our submission, the Reserve Bank bulletin figures are subject, I would suggest that the position of the industry as regards its profitability, its dividend, and its retention of profits within the industry compares favourably with the national average figures. And if I can

help the hon. Members further in interpreting these figures, I shall only be too happy to do so.

Shri R. P. Sinha: Sir, I am grateful to the hon. witness for the explanation he has given. I wish Mr. Misra would have been here, as he would have benefited; he is also an economist. I wanted to put a few questions in respect of research. Now, so far as basic research is concerned, only one company, i.e. CIBA in the private sector, is doing that. In the public sector some basic research is also being done by Pimpri. Now the complaint, Sir, is this that although, as is evident from the figures given by the learned witness himself the profitability figure in the pharmaceutical industry is higher than the general average of profitability in other industries, The pharmaceutical industry is not investing enough moneys in the basic research in this country. What they are doing, as they have themselves explained, is the formulation of a development process research. What we are anxious about in this committee is that in India we should develop basic research. Now I would like to know that although we had this patent law which is quite favourable—as they themselves say that the present law is preferable to the Bill as now before us—is it that your companies have not set up the basic research work in this country? Have you got any of developing basic research in this country? And if so, will that be affected by this present law?

Dr. H. R. Nanji: So far we have not been able to undertake basic research. The quantum is comparatively small. But there are certain fundamental limiting factors which have led to the situation. First of all, as Dr. Mukerjee has indicated, a worthwhile research unit requires a capital investment of something of the order of Rs. 60 lakhs and a recurring expenditure of Rs. 30 lakhs. Secondly, there is the absence in this country of a sound technological base of

organic chemical industry, pero-chemical industry and fermentation chemical industry. These three have not developed and these are absolutely essential for undertaking basic research. Thirdly, research is directly linked with the production. We have given you figures of production in the U.S.A. and other countries and also in India. Production in the USA is of the order of Rs. 1,645 crores per annum; production in India, as you know already, is of the order of Rs. 140-150 crores. Sir, I am quite certain that as time goes on, as production develops, as the technological base of chemical, petro and fermentation industries is built up, basic research definitely will be undertaken in this country, and I am quite certain that in the next ten years we shall see a very substantial improvement of this industry.

Shri R. P. Sinha: But I understand from Dr. Govindachari that basic drugs require chemical research and clinical testing. And clinical testing both at his institute, CIBA institute, and that at the ICSR and other places takes about 6, 7 or 8 years. Now, if this is the position, how to reconcile by having a lower period of the patent and at the same time develop basic research in this country? Now, the difficulty in my mind is this. If we reduce the period of a patent, it will affect, as explained by Dr. Govindachari, the development of basic research. Will you give your idea in this matter?

Dr. H. R. Nanji: I have been a member of the Executive Committee of the National Drug Research Laboratory in Lucknow for some years and this deficiency of clinical facilities in the country has been felt repeatedly in the last three or four years. I must say that the situation has considerably improved and it is hoped that further improvement will take place in the next two or three years, because special attention is being given to this question of clinical testing. At present, facilities are not

adequate. Therefore, it takes a long time.

Shri R. P. Sinha: I would now like to go to clauses. I would like you to tell what is your objection to clause 87(1) (licences). There are cases going on for 4, 5 or 6 years and the big companies which you represent are harrassing the people who want compulsory licence in such a manner that they cannot make use of the provisions of the compulsory licences. This has come to us as evidence. Could you tell us to ensure that you do not permit such a thing happen, i.e. when a compulsory licence is granted a man make use of it and not go into ruination on account of litigation as is being done at the present moment?

Shri S. V. Divecha: Sir, in so far as the Compulsory Licensing provisions are concerned it has been complained that the obligations or the grant of Compulsory Licences causes lot of delay. It is for this specific reason that we have submitted our amendment to clause 87(i) wherein we have specifically provided that Controller should decide the case in three months and the Appeal will also be disposed of in three months.

Shri R. P. Sinha: How can we give this direction to the High Court. Is it possible to give direction to the High Court?

Shri S. V. Divecha: As regards the Appeal against the order of the Controller the Tribunal could be directed by the Act itself to decide the Appeal.

Shri R. P. Sinha: And suppose the Tribunal does not dispose of the case what will happen? I have not seen any such piece of legislation where the time limit is put on the Supreme Court or High Court.

Shri S. V. Divecha: We have suggested a Tribunal.

Shri R. P. Sinha: Now we would like to ask from you there is lot of

complain and very correctly that the advertisement costs in this country are heavy. Now is it possible to reduce the cost of the medicines if they reduce the promotion expenses and advertisement expenses?

Dr. J. Reece: I would submit if the cost on advertising—which is already very modest—is reduced it is very likely to make the drug more expensive for the simple reason that higher volume of production brings lower costs and 7 to 9 per cent is not a large figure and if it is reduced and the drug does not sell, the volume falls down below an economic level and the cost must go up.

Dr. M. M. S. Siddhu: New processes for anti-T.B. and anti-malarial drugs discovered in India were referred to by Dr. Mukherjee. May I know which processes have been used by any other firms who are manufacturing any of these drugs.

Dr. S. L. Mukherjee: It is a personal question which relates to me and I beg indulgence of the member to give a personal answer. I was previously attached with M[s. Albert Davis Ltd. where for my patented process of INH and others, I was personally following the basic production.

Dr. M. M. S. Siddhu: Is any other firm using those processes in India?

Dr. S. L. Mukherjee: Yes. What I was telling was that while in Albert Davis Ltd. I was using those processes for basic production. They were following the processes that I patented when I was there.

Dr. M. M. S. Siddhu: Is it process patented or Product patented?

Dr. S. L. Mukherjee: It is a process patented. We were the first to introduce Talbutamide before even the Hoechst came into the picture.

Dr. M. M. S. Siddhu: Supposing Albert Davis do not allow and we

have to go on without that process what will be the result?

Dr. S. L. Mukherjee: I am a joint holder of the patent and I have received no notice from them so far and have left them in 1959. I am not aware of what is the situation here?

Dr. M. M. S. Siddhu: My second point is that much has been said about the need to approach the doctors for the new drugs and if the doctors are not approached the drugs would not sell. The prices will go up. But here is a sample of the literature which is meant only for doctors. Now see the contents. How much information does it contain? Are they only meant for having a look and then be thrown in the waste paper basket? If that amounts to sales promotion and on which large sums are being spent where is the need for such advertisement. This sort of literature which is neither informative nor contains the details. It contains some indications. How anything spent on these can be termed as a means of communication to the doctors.

Further from my personal knowledge I have come to know that the administrative charges on the personnel promotion that is on the representative visiting the doctor is about 1 to 1½ per cent. I am trying to break-up 8 per cent. 1 to 1.5 per cent are the charges on the representative who sees the doctor the rest of it is merely on sampling and literature.

Mr. J. Reece: First of all, when we talk about medical information for the doctor, there is still something more to be supplied to him than these mailings. The medical information that we have to present to the doctor, when we introduce a new product, is exhaustive and detailed and supported by clinical evidence and backed up by formal opinion with the medical reports, and most of the expenditure on sales promotion goes on the introduction of a new product.

I would ask the Members merely to cast their minds over what they

would do if they had to introduce a new drug, as I had mentioned this morning, a new cure for cancer, to the doctors of India and to get it used quickly.

The second point which the hon. Member has made is quite right. He makes a very good point when he asks what the use is of sending him this literature which merely gives him a few details about the product. Those of us in the pharmaceutical industry, on whom this responsibility lies are quite certain that no doctor would consider prescribing a new product as a result of seeing only a brief statement of the action and advantages. We know that. But, on the other hand, he might be sufficiently interested to seek further information on that product.

If I may submit something which has just occurred to me this morning, here is the booklet on the Indian pharmaceutical industry published by the Govt. of India which if left on your desk you would probably open and look at; after seeing the nice attractive cover, you would probably open and see it, the attractive cover would encourage you to look and see it. This cover, therefore, is worth its weight in gold, because if we do not look into a book we shall never know what is inside it, but if there is a nice cover for the book, we would be tempted to look inside. This is why we are trying to make our literature attractive to the medical profession.

I might mention another point and that is this. This question could be dealt with very effectively by quoting the example of the Soviet Union where under their system of medicine they do not have this type of promotional exercise; and the exact quotations unfortunately I do not have with me just now, but I shall be very happy to supply them. There, the Ministry of Health was bemoaning the fact that their doctors were not using new products and they were actually suggesting that the Ministry

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of Health should send out more attractive information to doctors to get them to use the new products. Also, they were suggesting that qualified pharmacists should call on the doctors and call on the health centres to tell them about the new products. So, if you do not do it this way, then somebody has got to do it.

Finally, I would like to make one further submission on two more important points. The pharmaceutical companies themselves are anxious to avoid making a bad impression on the doctor or unjustifiable claims, because if they do so they will only damage their own reputation, and the doctor will not accept that company as a proper company in the future.

In the UK, there is an open invitation to the doctors to be taken off the mailing list, but only a minor percentage of them have asked us to take them off the mailing list. I would be quite prepared to supply the hon. Member the figures, because I am sure, and I am quite certain, from my own personal experience, that the cost of medical representation is not as high as the cost on promotional expenditure in our country today.

Dr. M. M. S. Siddhu: I would very much like to receive those figures, because I find that it is about 7 or 8 per cent or more, in the case of firms whose balance-sheet is made available to the public. I am saying this, because I am not conversant with the position of those whose accounts are not made public. This question had come up recently in a conference of medical representatives, which I had inaugurated at Allahabad. It was from the medical representatives themselves who were asking for higher wages that this point had come up. It is more or less from the employees of the pharmaceutical industry that I have got this information. So, I am letting it out to you.

Mr. J. Reece: Thank you very much.

Dr. M. M. S. Siddhu: The other point that comes up in the price structure is the processing cost, which is very high. If that be the sole factor, then in the case of the new drug whose ingredient may be just a very small portion, a few milligrammes or perhaps 0.5 gms. the cost will be very high because largely it is the processing cost only.

How is it that the processing cost cannot be reduced? If that is reduced, then more money will be available for research, and you may not have to say that it is a blind man's approach, because you have to screen thousands of compounds out of which only one may be commercially useful.

Therefore, I would like to know whether the processing cost can be reduced to such an extent that one would be able to supplement the research with the money saved on it.

Mr. J. Reece: The fact of the matter is that new drugs are usually comparatively highly priced, and by 'highly priced' I mean highly priced in relation to other drugs. Our new drugs are very complex things, and they cost quite a lot to produce; quite apart from any money that you may spend on research to discover the new drugs, the cost of the whole equipment and the whole complex technique or process of producing them is very high.

In the pharmaceutical industry where we are competing vigorously with each other not only in price but by product-substitution, this is the safeguard that if allowed to its full range it will ensure that the patient will get the drug at the most economical price.

Every effort is made in striving to reduce the costs of production, because we want to try to get a larger market for our product against either some other therapy or some other company with a similar product; for, as you know in the case of the pyramid, if we price a drug at Rs. 100,

only a few people can take it; if we take the cost down to Rs. 50, then more people can take it; if we take it down to one rupee, then millions can take it, and there are millions who will take it, the lower the cost; so, the lower the cost, the greater the off-take and the more it raises the prosperity of the particular company. Let me assure you that every effort is made in a competitive situation to reduce process costs. But new drugs are expensive and new drugs are difficult to make.

Dr. M. M. S. Siddhu: I would like to refer you to the interlocking system which has been brought out by these administered prices, where a particular firm which has got a patent right allows some one to manufacture it but does not allow that firm to market it; by 'marketing' I mean the processing; they will be able to sell the bulk to X, and X will market it. By this method, they are able to keep up high prices. Through this interlocking system of buying from one company and selling it to the other, it has been found, that they make very high profits running up to a huge percentage. Another case is that of Pfizer, reported in the Sunday Times, of buying from a firm in Hungary and making a profit of 1,000 per cent. Here, it is not the processing, it is the bulk supply, and therefore that point that it is out of the processed product is being compared with bulk rate is not quite correct. It is abuse of a patent, that is all I say.

Mr. J. Reece: The only thing I can say is that this is not the general way the industry as a whole goes about this type of thing.

Dr. H. R. Nanji: If I may add, so far as this country is concerned, if there are any such instances, Government have got adequate powers to investigate.

Dr. M. M. S. Siddhu: Neither the doctors who prescribe know it nor the patients who buy such medicines, whether they are costly or cheap the

patient has to buy them, otherwise he has to leave the doctor. Therefore the patient is in a very bad situation.

Mr. J. Reece: Even in the cases you mention, the companies themselves operating within a total orbit do not make vast and enormous profits. The net result is something which the American Anti-Trust Department considers reasonable and the patient must be in good hands when he is in the hands of a doctor both from his treatment point of view and his economic point of view. Amongst other things I would like to submit that we must also not lose sight of the fact of the value to humanity that these drugs have brought about, because, in the final analysis, while people formerly had died or had to undergo long an expensive treatment, are now being cured. Unfortunately mankind has been able to solve our problems in the wrong order, namely disease first and then population control. This is the tragedy of mankind if I may say so. If we had discovered the solutions in the other order, first population control and then eradication of diseases, we would not be in such a position.

Dr. M. M. S. Siddhu: It is contended that most of the drugs coming in the market are likely to go out of the market in a short time because of improved drugs taking their place. In order to cover their cost, they have to keep the price high. If that is so then a ten year period is more than sufficient because 90 per cent of them will go out of the market within that time. Those that stay on will be because of the reputation of the firms behind them. And the doctors, having once got the habit of prescribing a particular drug by its trade name, I am sure, would go on writing the same thing even after ten years if that drug is worthwhile to be used.

Mr. J. Reece: That is correct. The doctor, even though you may present

him with something which is obviously better, will not accept it immediately. The point about risk is this. If I am putting up a plant for a particular compound, I have to invest my money, my time, talent everything in that plant, and the fact of the matter is that it is quite likely that somebody else will come along with an improved product and my plant will be useless. This is what is meant by risk. When you go into the pharmaceutical industry, you are exposing yourself to very great risks because somebody else may come up with something better. Even with a marginally better product, he has simply to get the doctors to prescribe it. So, for new products for the high rate of promotional activity they do, they have to get returns.

Dr. M. M. S. Siddhu: Certain drugs which have been proved to be useless clinically for certain diseases are still being advertised and doctors approached. Comparative data on medical research done all over the world is available and articles appear once in three years or so, but that is not advertised, nor is it mentioned anywhere that particular drugs have become useless. Therefore, through your literature you not only propagate certain things, but you are actually misleading the public.

Mr. J. Reece: I wish it were as easy as all that. We do not and we never deliberate set about to mislead anybody, because it is not in the interests of the industry. If we do not write, somebody else will. That is competition.

Shri Bade: You have objected to Clause 48 along with Clause 95(3). Coming to Clauses 84 to 90, suppose there are certain patentees from foreign countries coming here and taking out patents, but not manufacturing the drugs here, should the Government take any steps against them or not?

Shri S. V. Divecha: In so far as Clause 48 is concerned, we have already made our submission.

In so far as this is concerned, we feel that firstly there are ample provisions under the Act for securing against the abuse of a patent right. These provisions are contained in the provisions regarding compulsory licence under clause 84.

Also, under clauses 99 and 100 of the Bill, the Government can make use of an invention which will also include, in my opinion, importing of patented products from abroad. Our submission is that there are ample provisions in the other clauses of the Bill for making use of the invention for the purpose of the Government. Clause 48 does not provide for any appeal or judicial review or any fair or adequate compensation. Neither does it give an opportunity to the patentee to be heard.

Shri Bade: We have the same provisions in the Act of Japan..

Shri S. V. Divecha: There is no such provision which the hon. Member is referring to, in the Japanese legislation. The laws of Japan only provide for a compulsory licence where the patentee does not work an invention in the country.

Shri Bade: We have seen that there are so many companies which take patents and they are not manufacturing the drugs here. They are only importing the medicines from outside and thus they deprive our scientists and our country of indigenous research work. In order to mitigate it, do you feel that we should have provision in the Act?

Shri S. V. Divecha: We do have such a provision in the Act clause 84.

Shri Bade: It only refers to compulsory licence.

Shri S. V. Divecha: For non-working also.

Shri Bade: The Government would apply to the Controller and the Controller will say that it is compulsory

licence and that is after three years after sealing.

Shri S. V. Divecha: In so far as food and drugs are concerned, in our amendment we have suggested that the application can be made at any time after the sealing of the patent.

Shri Bade: Clause 48; this is only for Government use.

Shri S. V. Divecha: We have special objection to that clause, because it is widely and vaguely drafted. Secondly, it is completely redundant, because clauses 99 and 100 provide ample means to the Government to do what they want to do. What we are mainly objecting to is that any person should not be authorised by the Government to import the article from non-patented sources and to distribute it as he pleases. There is no provision regarding compensation and no appeal or reference to the high court.

Shri Bade: Is there such a provision in the patent law of other countries?

Shri S. V. Divecha: No other patent law in the world contains such a provision.

Shri B. K. Das: How is it that it affects fundamental rights? Is there any rule or authoritative opinion about that?

Shri S. V. Divecha: Our organisation has taken legal opinion, and we have been advised that some of the provisions of the Bill are such—

Shri B. K. Das: About clause 48, at page 3 of your original memorandum, you have said that this clause militates against fundamental rights of the citizen of India which have always been held as sacred to this country and to democracy. I was asking whether you have consulted legal opinion and whether you were advised like that.

Dr. H. R. Nanji: We have taken legal opinion on that.

Mr. J. Reece: I shall explain it. The situation is that a patent is not always a product, and out of the many patents registered, only one or two products come along. (As a *quid pro quo*, immediately, the benefits of research done by other countries they are made available to us straightaway. The problem with the "Government" clause in pure and simple terms is this: if it is left wide open for Government under any circumstances to bring any drug from any other source at any price it chooses, you will be biting at the very essence of the pharmaceutical industry in India, because the definition about the Government use is so wide to enable any interpretation to be put on it. The circumstances should only be emergent circumstances.

Shri Bade: All the processes are blocked out, and if research is done in America, what is the use of our scientists? Our scientists cannot take advantage of any process because all processes are locked up.

Mr. J. Reece: They can. We can apply for compulsory licence tomorrow. About 700 drugs are not even patented but are not made in India. There must be capital, technology and the willingness to take risks.

Shri Bade: From 1911 to 1965, nobody has taken the advantage of compulsory licence, simply because the procedure is long. We are cutting it short. The present Bill will mend the whole thing, but in the previous Act, the process was very long.

Now, the Haffkine institute has issued a memorandum which reads as follows *inter alia*:

"The following facts throw interesting light on this issue. Hoechst had taken out patent in many countries of the world including Japan, for their processes described in Ind. Pat. No. 58716. They claim that the process patented by Haffkine Institute *vide* Ind.

Pat. 64323 is already covered by Hoechst Pat. (I, P. 58716). However, one month after Haffkine Institute filed their patent in India, Farbwerke Hoechst applied in Japan (and possibly in other countries also) for an additional patent, covering the manufacture of Tolbutamide by process similar to that of Haffkine Institute. If their contention that the process of Haffkine Institute is already covered by them is valid, then that or similar process would not be novel or new and as such could not be subject matter of further patent.

Another interesting fact is that the Hoechst patent in Canada for Tolbutamide (same as Indian Patent No. 58716) was challenged in the court of law and was revoked on grounds such as (i) too wide a claim, (ii) covering more than what the inventor invented, (iii) not a manner of new manufacture, (iv) no utility is not all the products produced by the process have utility as claimed etc."

So, Haffkine Institute says that it was patented and then it was challenged in the high court in Canada. The case was lost. If such a thing happens, we must plug the loophole.

Shri S. V. Divecha: So far as Hoechst and Haffkine are concerned, the Hoechst patent has a priority date of 8th May, 1956. In that they have claimed several processes for the manufacture of new sulphonylureas. The Haffkine Institute, probably after examining the patent specification of Hoechst, invented a so-called invention for the process to manufacture the same kind of sulphonylure as which process was disclosed some years ago in the chemical literature. Therefore, we have been advised and it is our confirmed opinion that the patent of Haffkine Institute is completely dependent on the patent of Hoechst. The carrying out of the process described in the Haffkine patent would infringe the patent of Hoechst. This matter is *sub judice* and I shall

prepare a detailed note and I can give it to you.

Dr. M. M. S. Siddhu: Is it a fact that the same process was got patented in Japan after their original one?

Shri S. V. Divecha: In so far as this matter is concerned, we have to obtain the details from the patentee himself. I did not know that this question would be asked, and it relates to something—

Shri Bade: I am also a lawyer; that is *sub judice*. But this subject is not *sub judice*, that is, whether you have lost the case in Canada.

Shri S. V. Divecha: So far as Canada is concerned, this is the first time I hear about it. We shall obtain detailed information and I shall certainly be pleased to give it to the Committee.

Shri R. P. Sinha: The Haffkine Institute have shown that they could produce the medicine at one-fourth the price.

Shri Bade: For six years the case is pending, because everytime they are taking adjournments.

Shri S. V. Divecha: Adjournments have been taken sometimes by us and sometimes by the other side also. In fact, Haffkine Institute is not a party to the suit.

Shri Bade: I know.

I have a booklet where it is said:

"As stated in the USA Senate Report No. 448, 'even under liberal interpretation of research allowed by the internal revenue survey research costs of the 20 major drug Companies represents only 6.4 per cent of the total sales dollar.'

The said Senate Report states:

"India, which does grant patents on drug products, provides an interesting case example. The prices

in India for the broad-spectrum antibiotics Aureomycin and Achromycin are among the highest in the world. As a matter of fact in drugs generally, India ranks amongst the highest priced nations of the world—a case of an inverse relationship between per capita income and the level of drug prices.

Tolbutamide costs only \$1.85 for 50 tablets in many European countries, but in India it costs \$3.57. Chiopropamide costs only \$1.41 in Italy, but \$4 in India and so on. So, this is the general criticism that the patent-holders have created a monopoly. In your memorandum, there is no specific reply to this criticism.

Shri Keith C. Roy: I think that booklet has not brought out clearly enough the total results of the Kefauver hearings. The total result of the two years of the Kefauver hearings were two small amendments to the Patents Act which had no impact whatever on the operation of the Act. In so far as this famous statement is concerned, I have made a detailed study of the price-factors on which it is based. It is fair and proper that the Hon. Members of this Committee should know what are the basic facts on which this statement has been made. The Kefauver Committee asked the Department of State to collect price data on a certain number of products in different countries. The State Department supplied a very great deal of data and, out of that, the Kefauver Committee took only 12 basic ingredients which were being sold and manufactured in various countries other than the US. In so far as India was concerned, out of the 11 tables in which this information was set out, India was mentioned in only 6 of them. Regarding the statement that the prices of aureomycin and achromycin are highest in India it is correct so far as aureomycin is concerned. It is not correct in so far as achromycin is concerned. The price structure of four other products in regard to India was correctly given.

Shri Bade: Regarding achromycin, what is the correct position?

Shri Keith C. Roy: This is given at page 42, table 20 of Report No. 448—The Report of the Committee of the Judiciary, United States Senate made by a sub-committee on anti-trust and monopoly. The price of achromycin is shown as 128 in India and as 134 in Belgium. So, India is not the highest priced country. The price is expressed in terms of percentages, not in terms of actual money. So, *prima facie* the statement of Senator Kefauver about achromycin is incorrect.

Shrimati Sharda Mukerjee: I think your main objection is to the licence of right and royalty which is now fixed at 4 per cent maximum and which you consider is too low. I have before me some figures given on page 49 of your Supplementary Memorandum. You have given here the figures relating to sulpha drugs. The production in 1964 was 252.94 tonnes and in 1965-66 it has gone up to 1274 tonnes. Could you tell us what is the imported content in this, what percentage of it is imported?

Dr. H. R. Nanji: I will not be able to give you the exact figures for sulpha drugs. Generally the import content has gone down over the years.

Shrimati Sharda Mukerjee: I have another list here, giving the figures mostly about mycin drugs, and I find that out of 24 drugs listed there only 5 of them have some indigenous content. These are all very important drugs. From the point of development of our industry we are interested to know what proportion of it is imported.

Dr. H. C. Nanji: We will be preparing a detailed note on this statement giving all the facts, indicating what drugs are already being licensed for manufacture and all that.

Shrimati Sharda Mukerjee: Could you not tell me at least approxi-

mately what quantity is produced indigenously and what quantity is imported?

Mr. J. Reece: We are collecting the data and it is being supplied.

Shrimati Mukerjee: The point that I am making is this. We have had an unpleasant experience recently when the Indo-Pakistan hostilities were on. At that time this particular industry was almost coming to a halt because so much of the material was being imported.

Shri Roy gave us some figures about profit retained, profit ploughed back and all that. If the import content is high and the imports are from your main companies abroad, then how much of the profits are ploughed back and how much of the profits are retained take a different shape altogether. It also contains the technological know-how fees. That also has to be taken into consideration. If the thing is processed here and research is carried on here due to which the import content over the years has been reduced, then the profits retained, profits ploughed back, the shape of the capital and all that sort of thing would have a different meaning. It is really not to create any insecurity among the people who come from outside and invest in our country that we are doing this, it is because we wish to give a better opportunity to the people of this country to use and exploit their ability and the raw materials that are available here. It is from that point of view that you must look at this licensing of right. Over the years we find that there has been very little progress in this country as far as this industry is concerned.

Shri S. V. Divecha: In so far as the progress achieved by the industry is concerned, I would like to invite the hon. Member's attention to page (1) of our Supplementary

Memorandum, where we have given the figures of increase in production and saving in foreign exchange.

Mr. J. Reece: People are bringing their technology and their know-how to India willingly and building up the indigenous industry. We have seen large plants, large chemical plants being built in this country. The whole pharmaceutical industry is on an international basis. During the last trouble one of our great advantages was that we had a great deal of indigenous production within the country. This is going forward and it is going forward rapidly and we want it to go forward further. Once a technology is developed it will become self-generating. This is what is happening here. All industries are made to do more and more. But ultimately it will take time. The trouble with licence of right is, it does frighten people away. Licence of right is a frightening phrase. It has a certain connotation in many countries. We say, it is not necessary to put licence of right provision. Why frighten people away when the same protection is available within the law?

Shri B. K. Das: You say it is more a psychological thing.

Mr. J. Reece: Certainly. Licence of right has a connotation to everybody. It means something in other laws. If we put it in our law and however much try to qualify it, still it is there as licence of right.

Shrimati Sharda Mukerjee: In this eight year old report, Justice Ayyangar has mentioned that all other countries put this restriction of compulsory licensing. The only exception is U.S.A. which has a very different economy from ours. Our country requires a certain amount of protection and the Bill itself provides for a licence of right under certain conditions.

Mr. J. Reece: The intention of our Association was to present a com-

pulsory licence clause. If that can be done, there is no need for licence of right. If there is no need, why should we put in a great barrier which otherwise is not there?

Shri Shyamnandan Mishra: I have been unfortunately mostly absent from the meeting. So, I do not know whether my questions have been already covered. Still, I would venture to ask two questions purely for the sake of clarification.

We are indeed very glad that this pharmaceutical industry has made tremendous progress in India. This is indeed a matter of great satisfaction. Yet one has a feeling that in the matter of research, we have to go a long way in this country in this field. It is also true that it is quite impossible for individual units to go in for any meaningful or significant research activity. It was mentioned in the forenoon that for any significant research activity a minimum amount of Rs. 30 lakhs would be required. That being so, naturally the question arises in our minds whether some kind of joint research programme could not be evolved and worked out by the pharmaceutical industry as a whole. We have got the example of A.T.I.R.A. and a similar one in Bombay so far as textile industry in India is concerned. The hon. gentleman on the other side knows that in the United Kingdom they have a joint research organisation for the steel industry, for example, B.I.S.R.A. That being so, would it not be quite proper for the pharmaceutical industry of this country to explore the possibility of having a joint research programme, or, have they already made some progress in that direction?

Mr. Chairman: The answer has come. They said they have not done that. They are thinking on that line.

Shri R. P. Sinha: They said they do not want joint venture.

Shri Shyamnandan Mishra: The financial contribution by Government for such research activity is quite significant. It is of the order of 50 per cent in the case of A.T.I.R.A.—50 lakhs by the textile industry and 50 lakhs by the Government. If you do not want to avail of this opportunity, that means you want to depend on foreign patentee.

Mr. J. Reece: The reason why we do not want it is that we believe that we can do better research on our own because there will be an element of competition.

Shri Shyamnandan Mishra: The amount set apart is 3 per cent of the total turnover. In order to have 30 lakhs, there should be a turnover of 10 crores. When will that consummation take place and how many companies will come under this in India?

Dr. S. L. Mukherjee: I have explained to the hon. Members of this Committee that basic research can be done only by large companies. It will be futile to do scientific research in a basic way so far as small companies are concerned because the risks involved and the expenditure involved are too much. As you have rightly pointed out, only companies with a turnover of 10 crores and over can think of doing this. Today in India such companies are very few and those few are seriously thinking of doing this research.

Shri Shyamnandan Mishra: Only thinking of?

Dr. S. L. Mukherjee: They have already started doing. Ciba is doing; Alembic is doing and Sarabhai is playing a small part in it in a small way. For others it is a waste because unless you do it on a minimum scale, there will be no result forthcoming. The money we spend must be fruitful. That is the main aspect about it. Secondly, taking the lead of the hon. Member's idea on research in a

meeting organised by the CSIR in Delhi in last December I had pointedly suggested that if Government could have a screening centre where we could give, without disclosing the identity but by paying whatever reasonable amount is required, that might lead to a solution. It is worth consideration by the Members of the Committee and the Government. Through the universities and various other sources and industries we could produce thousand of compounds a year without any difficulty. But there is no facility for screening.

Shri Shyamnandan Mishra: Alternatively, would it not be possible to have a kind of research levy from individual units which cannot do research and utilize that amount in research activity by Government.

Dr. S. L. Mukherjee: I already explained in the morning that the research for the development of new drugs requires tradition, requires culture and that if you analyse the discovery of new drugs you will find that 95 per cent of the drugs were discovered by the industry. I firmly believe that it is the industry which can deliver the result, not Government institutions.

Shri Shyamnandan Mishra: As it lies largely in the field of intangibles, I would not pursue this matter further. Should not the period of validity be governed by the speed with which technology is getting obsolete and the drugs are getting out of use in the modern world? If so, why should there be so much of insistence upon the period of patent validity being so long?

Mr. J. Reece: The answer to your question is that, on the whole the trend of patent protection round the world is to extend the period of time for the life of the patent, because it is becoming more and more difficult to discover and develop drugs; and it is not a simple matter of discovering

something today; five years later it is going to be out of date. So, there is very good need for a good period of time, a good length of time for patent protection.

Shri Shyamnandan Mishra: Is there no consideration for the speed with which technology advances and the drugs become out of use? Should not that be the most important governing factor, so far as the period of patent validity is concerned?

Mr. J. Reece: When you take out a patent, somebody is going to compete with it after some time. Also even if we allow it to run for the full period, the law of diminishing returns sets in.

Shri K. V. Venkatachalam: Could you give us the figures of imported finished drugs? If, as you say, the production in India is of the order of Rs. 150 crores, which is a very sizable quantity, why do you not manufacture those drugs which are now being imported?

Mr. J. Reece: The demand for those medicines is so small that it is not worth putting up a plant.

Shri K. V. Venkatachalam: So, the large bulk of our requirements are made in this country now?

Dr. H. R. Nanji: Yes;

Dr. M. M. S. Siddhu: You have referred to the import of drugs worth only Rs. 9 crores as against the production of drugs worth Rs. 150 crores. A lot of chemicals are imported and used by the pharmaceutical industry. So, what is the import content of these chemicals.

Dr. H. R. Nanji: This Rs. 9 crores consists of intermediates and basic products; not chemicals.

Shri K. V. Venkatachalam: Could you give us an idea of the proportion of patented and non-patented drugs in India, firstly, in terms of number

and, secondly, in terms of value of the end product?

Dr. H. R. Nanji: At the moment, we do not have those figures; we can supply them.

Mr. J. Reece: The portion of non-patented drugs is much higher than those of patented drugs.

Shri K. V. Venkatachalam: We would like to have precise information both in respect of value and number.

Shri S. V. Divecha: It is difficult to get that information. May I invite your attention to page 45 of our memorandum? We have actually conducted a sample survey on sale of pharmaceuticals containing patented ingredients.

Shri K. V. Venkatachalam: Supposing the total consumption is Rs. 200 crores. How much of it would be patented drugs?

Shri S. V. Divecha: The sample survey has revealed that the sale of patented drugs was approximately 32 per cent of the total sales. There again the definition of patented drugs has been rather wide in the sense that we have also included those drugs which are patented and which do not enjoy exclusive monopoly or exclusive right.

Dr. M. M. S. Siddhu: Suppose medicine ABC has got ingredient B alone patented and not A or B. Will you include it?

Mr. J. Reece: In certain cases we have. We are talking of patents in terms of monopoly. If you take Vitamin A and B complex, everybody is making it. There is no monopoly.

Dr. M. M. S. Siddhu: You cannot have a formulation ABC if C, which is patented, is not put into it to make the formulation. It is something like a filter, which is necessary for an engine. If you do not put the filter, you do not have the engine.

Mr. J. Reece: If I have got a patented drugs and nobody else has got it, I can do what I like. That is one type. The other type is that there is a product which anybody can market containing one or two patented drugs.

Shri S. V. Divecha: I would like to invite your attention to Appendix 6 and Appendix 7 of our Supplementary Memorandum which give classification of drugs in common use. We have indicated in the list drugs which are patented and those which are not patented.

Shri K. V. Venkatachalam: My last question is this. You were saying that the further development in the pharmaceutical industry at the intermediate and lower level will depend on the development of fine chemicals, fermentation and petrochemicals industries. What is the percentage of these industries? Have you taken any steps so far as this is concerned?

Dr. H. R. Nanji: Development of petrochemicals industry does not come under the purview of the pharmaceutical industry. But there are big giants in the chemicals industry who are certainly going very fast ahead with the petrochemicals industry and also with the fermentation industry.

Shri K. V. Venkatachalam: Will there be development in the next three or four years?

Dr. H. R. Nanji: Yes.

Shri K. V. Venkatachalam: What about fine chemicals?

Dr. H. R. Nanji: The Hindustan Organic Chemicals Factory is there.

Shri K. V. Venkatachalam: That has been there for several years. What is your expectation?

Dr. H. R. Nanji: The difficulty has been that for several years, applications from the private sector were turned down on the ground that the Hindustan Organic Chemicals will be manufacturing certain intermedi-

ates. Fortunately, this policy has been changed during the last two or three years and now licences are being granted for the manufacture of intermediates and chemicals which are required.

Mr. Chairman: You have told us only about yourself. What is the function of your Organisation?

Dr. H. R. Nanji: We shall send you the detailed booklet which gives all the details.

Mr. Chairman: Can you give us the main objectives of your Organisation?

Dr. H. R. Nanji: The main objectives are to look after the interests of the members, to cooperate with the Government and, generally, to increase the standards of working of the industry.

Mr. Chairman: Is it a registered body?

Dr. H. R. Nanji: Yes, Sir.

Mr. Chairman: How long has it been registered?

Dr. H. R. Nanji: About a year ago.

Mr. Chairman: Only a year ago? Were you under any other name before?

Dr. H. R. Nanji: There was another association which had included not only manufacturers but also wholesalers and distributors. It was felt by many of us that it is absolutely essential to have a separate organisation of manufacturers only and that is why this organisation was started.

Mr. Chairman: Thank you.

Dr. H. R. Nanji: On behalf of my colleagues and myself, I should like to thank you for the courtesy you have extended to us and also for the patient hearing given to us. Thank you.

(The witnesses then withdrew)

The Committee then adjourned.

Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965.

Friday, the 12th August, 1966 at 14.00 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

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13. Shri Chhotubhai M. Patel.
14. Shri R. Ramanathan Chettiar.
15. Shri Sham Lal Saraf.
16. Shri A. T. Sarma.
17. Dr. C. B. Singh.
18. Shri K. K. Warior.

Rajya Sabha

19. Shri T. Chengalvaroyan.
20. Shri P. K. Kumaran.
21. Shri Shyamnandan Mishra.
22. Shri M. R. Shervani.
23. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

LEGISLATIVE COUNSEL

Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Incorporated Law Society of Calcutta.

Spokesman:

Shri B. P. Ray

II. Council of Scientific and Industrial Research, New Delhi.

Spokesmen:

1. Dr. S. H. Zaheer, *Director General, C.S.I.R. and Ex-officio Secretary to the Government of India, Ministry of Education.*
2. Shri Baldev Singh, *Industrial Liaison and Extension Officer, Directorate of Research Co-ordination and Industrial Liaison, C.S.I.R.*
3. Shri R. B. Pai, *Patents Officer, C.S.I.R.*

I. Incorporated Law Society of Calcutta.

Spokesman:

Shri B. P. Ray.

(The witness was called in and he took his seat).

Mr. Chairman: Mr. Ray, whatever evidence you give will be printed and distributed to the members. It will be laid on the Table of the House. Even if you want any portion to be confidential, it will be printed and distributed to our members. We have received your memorandum. It has been circulated to all the members. If you want to add anything new or supplement it, you may kindly do so.

Shri B. P. Ray: Sir, I do not think that any part of my evidence given here need be treated as confidential. My main points concern Chapter XXI of the Patents Bill, incorporating therein clauses 125 to 132. I represent the Law Society of Calcutta. It is a Society whose members are Solicitors enrolled in the High Court at Calcutta. There are many Solicitors as also Advocates who have been for years past practising as Patent Agents. I cannot say definitely, but from random samples taken of Advocates and Solicitors in Calcutta—specially my office where we have a number of them, it would not be incorrect to say that at least 75% of the Solicitors and Advocates on the roll of the Calcutta High Court do not possess a Degree in

Physical Sciences or Engineering. It is a common feature, Sir, that at that stage in their University career when they are permitted to opt for a specialized line, students who opt for a Science Degree or an Engineering Degree do not generally take a Law Degree thereafter. We, therefore, Sir, view with great alarm the formidable restriction included in sub-clause (c) of clause 126 of the Bill which seeks to make it law that a person shall not be qualified to have his name entered in the Register of Patent Agents unless he has obtained a degree in Physical Science or Engineering. I may be permitted to ask, Sir, what is the rationale or underlying principle of this requirement? In the Report of the Committee presided over by Hon. Mr. Justice Ayyangar it had been stated that in India there is no recognized organization or Institute of Patent Agents corresponding to the Chartered Institute of Patent Agents in the U.K., and from there it has been recommended in that report that certain classes of persons should only be registered as Patent Agents, and from the practical point of view each of those classes required the possession of a Degree in Physical Science or Engineering or equivalent scientific or technical qualification. In the first place, Sir, may I be permitted to ask what is really "physical science". It has not been defined in the Bill. I have myself looked into Webster's Dictionary and the Concise Oxford Dictionary, both under the entries "physical" and "science". But I have not found any clear definition given in those Dictionaries of those words in that combination, viz. "physical science". May I be permitted to ask what is a physical science? Is Botany, Geology, Biology or even Hygiene a branch of physical science and, if so, what will be the strict relevance of a degree in those subjects in the context.

Secondly, Sir, if I may be permitted to make a humble submission. I wish to state that a degree in physical science or engineering without adequate legal training cannot possibly

equip a person to draft applications and documents which are necessary in connection with patent cases. The subject of patents, I submit, envisages the entire dominion of human invention. A degree in physics or chemistry or pharmaceuticals will be of no particular use in a patent problem relating to engineering or *vice versa*. I, therefore, submit, Sir, unless a patent agent is expected to specialise in omniscience it is difficult for us to see how a degree in one of those science subjects will be of use in a problem arising from any of the other science subjects.

I then come to the difficulties from the practical point of view which particularly touches my profession. There are many solicitors practising as patent agents. My firm has been practising as such and advertising as such in the Law Directories and Law Journals for a long time and practically all over the world. Although the word 'advocate' has been used in clause 126 the words "solicitors and attorneys" have been omitted although these words occur in the Ayyanger Committee Report. We have already dealt with in our Memorandum as to the type of work a solicitor does and under English Law, as far as I know, solicitors are practising as patent agents although certain restrictions have been placed on the qualifications of patent agents. We, therefore, feel, Sir, that the words solicitors and attorneys" have been omitted from the Section without reason. Secondly I submit that there are many solicitors & advocates who have been practising as patent agents and the qualifying requirement of a science or engineering degree will throw them out of practice. This will cause, firstly, great hardship to the individuals concerned and, secondly, the value of the great experience built-up by them will not be available to the inventors. The problem of patent law is essentially a problem of law and the application of law as such is something in which lawyers are expected to be specialists.

Thirdly, Sir, if the Bill is passed in its present form, for years to come the practice of patent agents so far as lawyers are concerned will be turned over to persons who happen probably accidentally to have an engineering or a science degree. A lawyer and an engineering degree is, as far as I know, a rarity and this will tend to create, at least for years to come a monopoly which will be a monopoly of those lawyers only who happen to have a science degree and that does not necessarily mean that they are the best in the line or that it will provide the best assistance that an inventor could expect to obtain when he comes forward with a patent application. I also submit that this will deprive the Controller of assistance from experts at a time when such assistance is all the more needed having regard to the complications likely to arise from administering this Act which is new and much more comprehensive than the Act which is intended to be replaced. Our submission, therefore, Sir, is that the restriction should be removed altogether, at least it should not be brought into force unless an institute of patent agents has been established on the lines of the Chartered Institute in the U.K. It is felt that the restriction must be retained in the Act even now, the enforcement of that requirement could be postponed until such time as we were ready for it and it is not uncommon for different provisions of an Act to be brought into force at different times. These are the submissions which I wish to make.

Mr. Chairman: You have no objection if we make this applicable to future entrants and allow the existing solicitors and advocates practising to continue.

Shri B. P. Ray: That will meet my point to a large extent if the requirement of science degree is not imposed.

Mr. Chairman: Some technical knowledge for a patent advocate is

necessary that is why probably that has been introduced.

Shri Sham Lal Saraf: As far as present practising advocates and solicitors are concerned, I think, our hon'ble friend has made a good case for them but what about future. At least somewhere it must stop.

Shri R. Ramanathan Chettiar: Excepting that you cannot appear for the purpose of specification you can appear for other purposes.

Shri B. P. Ray: That is true because clause 132 provides for that. But my submission is that a very important part of a patent lawyer's job is the specification and matters connected therewith and to take that work away from the practising advocates who have devoted their lifetime practice to it would be really robbing them partly of their living. It would also enhance costs in the sense that the administration of the law to that extent would become much more expensive because we will no longer have the benefit of the built-in experience of a large number of practitioners.

Shri R. Ramanathan Chettiar: Let me understand you clearly. Filing of specification is of technical nature. So it can only be done by the prospective pharmaceutical entrepreneur whosoever is putting up the industry or whosoever is incharge of the drug industry—I mean the legal aspect. So why do you think that filing of specification is a very important feature as far as the filing of the specification before the Controller is concerned.

Shri B. P. Ray: A patent application starts from the drafting of the specifications. A client comes to us. He may be an expert in that line as often as he is not. When he comes to us to draft specifications which comply with all the requirements of the law, he expects us to do so in such a way that there is no alteration or correction to be made. In other words, to draft specifications is a matter of art and it is more in line with a lawyer's

equipage than anything else. So far as technique is concerned, as I have told you, a mere science degree in physics will not help him when he touches a problem of chemistry, engineering and *vice versa*. As I just now said, no patent agent can be expected to specialise in omni-science. His knowledge will naturally be limited. It is in the field of the lawyer's activity. It is his educational training which probably enables him to do better than others namely, to frame documents which not only comply with the law but also with the above branch of law.

Dr. C. B. Singh: The idea is that we want the cadre of patents to be so adjusted that the work of patent law is better done. I hope you will agree that a graduate in science—whether it is physics or chemistry or engineering—will be a better patent agent than one who does not possess that. There are many advocates who are science graduates and there is no doubt about that. I think those who have not got the science qualifications must practise something else. Anyway don't you agree with me that a graduate in Science will be a better patent agent than anybody else?

Shri T. Chengalvaroyan: In cases of lawyers being patent agents, on questions which involve engineering or scientific aspects, do they not consult the specialists in that line and incorporate their view? I think that is the practice.

Mr. Chairman: That he has stated in his memorandum.

Shri B. P. Ray: I have stated in my memorandum as to how exactly a patent lawyer works. He is not expected to know all branches of inventions. But, then, he is suited to draft documents which really form the very basis of an application for patents. Whether he succeeds, or fails is a matter of luck. It is easy for him to get proper assistance from technicians or scientists.

Shri P. S. Naskar: You referred to something that is obtaining in England. So far as patent agents are concerned, would you tell the Committee as to what qualifications are necessary for one to act as a patent agent under the English Law?

Shri B. P. Ray: If you will kindly refer to page 6 of my memorandum; I have stated that to become a patent agent, one should be a member of the Chartered Institute of Patent Agents.

Shri P. S. Naskar: I want to know as to what are the qualifications required to become a member of the Institute?

Shri B. P. Ray: I have dealt with this in the last para of my memorandum. If it is to be done in a phased manner, then we should prescribe the rules, syllabi, curricula and the qualifications to be attained by a person before he becomes a patent agent. It would be too early to impose this sort of a restriction viz., to become a graduate in physical science or engineering to be useful in any way.

Shri P. S. Naskar: We have to make some move in this respect. Till such time, you know, under the existing rules, anybody can be called a patent agent in India. I can even become a patent agent. We find that everybody is declaring himself to be a patent agent just for some consideration. And no qualification is necessary in India—I am, however, subject to correction—to-day for one to become a patent agent. Will you leave this matter as it is or do you want to keep the monopoly with the lawyers only?

Shri B. P. Ray: No, Sir. All that I wanted to say is this. We should build up experience in the practice of the Patent Law.

Shri P. S. Naskar: Do you agree that to be a patent agent, one must have more than legal qualifications?

Shri B. P. Ray: Yes, Sir, But, the thing is this. If you prescribe a particular course or if you establish an institute on the lines of the Chartered Institute of England I have no objection. Just as we become solicitors after our being with a Solicitor for five years in the same way the patent agents should become patent agents. There cannot be any objection to that. But, to substitute that by this shortcut method, if I may be permitted to use that word, will not serve the purpose.

Shri P. S. Naskar: This is a means to an end. It is not a shortcut method.

Shri B. P. Ray: I would submit most respectfully that at present this method will probably be more than counterbalanced by the harm which it will do to the patentee, to the administration and to the profession as also to the inventors.

Shri R. Ramanathan Chettiar: You say that it will do harm to the Administration. Would you kindly elaborate that point?

Shri B. P. Ray: The Administration will not have the benefit of the experience of all the lawyers who have been practising in that line and who do not possess a science degree.

Shri R. Ramanathan Chettiar: I hope you will agree with me that the present Patent Act is a very outmoded one having been passed in the British days in 1910. With the changing conditions of our economic as also the new developments in science, particularly in the pharmaceutical industry, don't you think that a lawyer patent agent, apart from his legal knowledge, should have some experience of scientific knowledge as well? That is why, as my hon. friend Shri Naskar put it correctly, it is a means to an end. I am only reiterating as to what my friend has said. We want a lawyer who has not only got the legal acumen but also a scientific knowledge to help the administration.

807(B) LS—20.

Shri B. P. Ray: If the scientific knowledge were properly channelled and a syllabus or curriculum were framed by which the adequacy of knowledge can be rightly measured, probably, I have no objection. But, before we have actually established an Institute of Patent Agents on the lines in England, I suppose, this will not meet the purpose.

Dr. C. B. Singh: Don't you feel that we should maintain the qualifications which will be necessary for future courses especially for this type of work? That is a very important thing; we should have a cadre of specialists for this purpose. The time may come when it will be worthwhile to have this qualification for the patent agents.

Shri T. Chengalvarayan: There is this practice now obtaining before the Income Tax Appellate Tribunal that lawyers as well as Auditors are allowed to appear. Suppose there is this alternative qualification of a patent agent being a solicitor and a scientific man, have you any objection to that?

Shri B. P. Ray: I have no objection at all because it is not my object at all to restrict Patent law practice to advocates and solicitors only.

(The witness then withdrew)

(Thereafter the representatives of the Council of Scientific and Industrial Research were called in).

II. Council of Scientific and Industrial Research, New Delhi

Spokesmen:

1. Dr. S. H. Zaheer, Director General, C.S. & D.R. & Ex-officio Secretary to the Government of India, Ministry of Education.
2. Shri Baldev Singh, Industrial Liaison & Extension Officer, Directorate of Research Co-ordination & Industrial Liaison, C.S. & I.R.

3. Shri R. B. Pai, Patents Officer,
C.S. & I.R.

*(The Witnesses were called in and
they took their seats)*

Mr. Chairman: The evidence that you give will be printed and published and given to all our Members and also laid on the Table of the House. Even if you want any portion to be kept confidential, it will be printed and published and given to members and laid on the Table of the House. We have seen your memorandum and it has been circulated to all our Members. If you want to add anything and stress upon anything, you may please do so. Thereafter our members will put some questions.

Dr. S. Husain Zaheer: We have already submitted in broad outline. I am in full agreement with the proposed Act. I feel that the existence of a system of patents where 90 per cent are foreign patents has obstructed the growth of certain industries in the country, chiefly the chemical industry with which can be related the pharmaceutical industry and has resulted in high prices in the pharmaceutical industry also on account of that in the agricultural chemicals connected with that. I feel that the provisions which are now proposed to be made in the Act are very much in the right direction although my personal feeling is that they are also a compromise.

The compulsory licensing provisions, in the past, have not been of much assistance in view of the inordinate delays which compulsory licensing provisions entail.

The Patent System has come in the way of indigenous manufacture, for example paludrine, radio opaque dyes, reactive dyes and pharmaceuticals like tolbutamide. Indian entrepreneurs refuse to undertake manufacture of patented items because they cannot depend upon compulsory licensing provisions because it takes years to get through. Therefore, my view is that no patent should be granted for

the manufacture of compositions or end use of pharmaceuticals, fine chemicals and drugs. No patent should be granted for any item for its end use. The decision to permit manufacture under compulsory licence should issue within one year from the date of application for compulsory licence.

The high prices in India of a number of these drugs—for e.g. chloromycetin, tetracycline hydrochloride—I feel, are due to the patent system. The prices in India are very much higher than the international prices. Italy is a good example.

It is sometimes said that the removal of the patent system will reduce the expenditure on scientific research on these items. Factually it is not so. In America about 350 million dollars are spent by pharmaceutical firms and chemical firms on scientific research while in India the total expenditure is less than Rs. 1 crore and 80 per cent of this also is from State resources.

Similarly, for food items also, I think the patent system, especially patenting of processes and patenting of trade names for food items also is not conducive to development of food technology and development of food trade in the country.

Patent system, in my view, has proved detrimental to starting of new industries in the country. This position has been fully admitted by the two earlier Government Committees on Patents.

Secs. 22 and 23 have been of no use as foreign firms have adopted dilatory tactics. The compulsory licensing provisions have been practically of no use because of the tortuous legal process involved. We have failed to get from May & Baker licence for sulphathiazol in spite of intense litigation. Similarly, for ICI's paludrine. Hindustan Anti-Biotics has lot of trouble with foreign patentees

even with regard to the manufacture of penicillin and tetracyclin although they got them under WHO patents. Litigation is still in progress with a very well-known German firm and the Indian firm has asked for the revocation of the patent and it is going on for several years. Therefore, no patent should be granted for process of manufacture or of the end product in pharmaceuticals, insecticides and food and chemical products. If this is considered an extreme step, then at least the provisions which are now contained in the Bill should be accepted.

These are my general views.

Dr. C. B. Singh: How many patents have been taken by the National Laboratories recently either for drugs or chemicals or dyes or something else?

Dr. S. Husain Zaheer: Nearly 1,200.

Dr. C. B. Singh: How many of them are being utilised?

Dr. S. Husain Zaheer: We may say between 150 and 200—that is over 10 per cent.

Dr. C. B. Singh: Have you taken any patents outside India?

Dr. S. Husain Zaheer: Yes, Sir, we have taken about 200 patents outside India.

Dr. C. B. Singh: Is that bringing any foreign exchange to this country?

Dr. S. Husain Zaheer: No, Sir.

Dr. C. B. Singh: How is that?

Mr. Chairman: Are you not getting any royalty on this?

Dr. S. Husain Zaheer: From abroad, no, Sir. From India we are getting. Although we have taken about 200 patents, none of them is being utilised, though we are making efforts to utilise them. Of course, there are reasons for it. We have not been able

to evolve any proper machinery for exploiting them. Normally, either these local firms that are there contact the interested parties or they appoint agents. We have also appointed agents, but they are not proving very useful.

Dr. C. B. Singh: Won't you agree that taking up of the patents by foreigners depends entirely on the utility and the advantages that can be had by the producing firms? If those patents were of that order, probably they will take it up, use it and advance it. Is that a correct assumption?

Dr. S. Husain Zaheer: I daresay it is partly correct, but partly also utilisation depends upon the agency efforts of a middleman who is able to convince the exploiting parties that they are useful and that they can go into production. I will cite in that connection one example. A drug with which I had some connection was synthesised in a laboratory which now belongs to the CSIR and we wanted to take a patent, but the authorities did not allow us to take a patent. Now that drug is being manufactured and sold all over the world. But initially we were not very keen at that time. We just published it; we were more interested in scientific research. We did not take any patent in India. And that drug is now being utilised extensively all over the world.

Dr. C. B. Singh: That supports my view.

Dr. S. Husain Zaheer: I am not sorry about it.

Mr. Chairman: Is it not a disincentive to our inventors?

Dr. S. Husain Zaheer: No, Sir. As a matter of fact, in this particular case, it has not proved a disincentive because we are still carrying on a very big school of research on these types of drugs.

Dr. C. B. Singh: You know that in Pimpri, we have taken a patent for one of the antibiotic products, Haemycin. This patent is being talked about

by American firms and they are prepared to pay even a high royalty. If that patent was taken outside, don't you think the country will get benefit and we will be earning a large amount of foreign exchange if it succeeds?

Dr. S. Husain Zaheer: Sir, in this particular case, I am doubtful. Here we are concerned only with a developing country like India and it is with particular reference to India that I am speaking. I am not against patents, for example, in Germany or the United States, but I am definitely against patents in India.

Dr. C. B. Singh: But why you are against patents in India?

Dr. S. Husain Zaheer: As I have explained in my opening remarks, there are two important reasons: one, it obstructs development of indigenous industry and indigenous knowhow and two, it leads to artificial high-pricing of some of the essential drugs which are required for the health of the population of this country and for the economic development of our country.

Dr. C. B. Singh: I don't know, Sir, if the witness is aware that the question of high price is a highly disputed one. Several witnesses have come and given evidence. It is a highly disputed point. Any way, we will not talk about it with him now.

Recently we went to the CDRI and there we found that there are very great chances for certain important things and if patents are taken outside, we are likely to get a large amount of benefit. So, if Indian scientists under your guidance are able to produce some new drugs or chemicals, which are of such an order that they will be patented in the outside world and will bring in a large amount of foreign exchange, don't you think it is advisable to have those patents taken out in this country as well as outside?

Dr. S. Husain Zaheer: This is what exactly I would like to repeat, that I am not in favour of taking these

patents in India, but in a country like the United States where the system is very well established and methods for exploitation also are available and where we have no say whether patents should exist or should not exist, as long as it does exist, if it can bring some benefit to this country, I am in favour of it. For example, we have actually entered into agreements with two firms in the United States—the CDRI and the regional laboratory at Hyderabad—for the testing and patenting and later exploiting of drugs developed and worked in that laboratory. But we have made an exception. We have given them the world rights and a share of royalties except in India.

Dr. C. B. Singh: Now there are three types of patents: process patent, product patent and a combination of the two, product by process patent. Out of these three, our Bill describes patent by process alone. What have you to say on that?

Dr. S. Husain Zaheer: I personally would not give any patent either to the product or to the process.

Dr. C. B. Singh: Knowhow is some combination of the two—product by process?

Dr. S. Husain Zaheer: My personal view is, I would not advise Parliament or Government to allow any patent on either the product or knowhow or process knowhow....

Dr. C. B. Singh: Knowhow is something different.

Dr. S. Husain Zaheer: I am against any patent for product or process or product-cum-process.

Shri R. Ramanathan Chettiar: One fundamental point. Mr. Chairman, the learned witness being Head of the C.S.I.R. has been kind enough to come here to give evidence. From the beginning uptil now, he has been saying that he is against patents and he has also made a remark that if he were to advise Parliament and the country,

he is against patents for process or even for product. Sir, once the principle having been conceded and Parliament having brought forward a Patent Bill and it is being discussed by the Select Committee, I think it is too late in the day for the learned witness to....

Mr. Chairman: One can express one's views. We may accept it or we may not accept it.

Shri R. Ramanathan Chettiar: No, Sir, if he has come with that pre-judged view, we are helpless.

Shri Sham Lal Saraf: It is for you to bring him out.

Shri R. Ramanathan Chettiar: Sir, let my remark be recorded.

Shri Sham Lal Saraf: Why should we prevent him?

Shri R. Ramanathan Chettiar: Mr. Chairman, I would like my remarks to be recorded.

Mr. Chairman: All right. Let them be recorded.

Shri M. R. Shervani: It is absolutely unfair remark. It is in a way intimidation of the witness. He has come here to give his frank opinion. Why should we....

Mr. Chairman: It is for you to accept it or not.

Dr. S. Husain Zaheer: Let me say, Sir, I am against patents for process, for product or process-cum-product in the fields which I have enumerated.

Dr. C. B. Singh: Here in our Bill, we have mentioned that in case of dispute the final decision will lie with the Government. Will you say anything on that?

Dr. S. Husain Zaheer: I think that is very great advance that it is, not justiciable but it is by an executive decision. Government takes a decision, whether to allow or not to allow it.

Dr. C. B. Singh: People have come to say that if you leave a decision to the executive, it cuts at the very root of the judiciary.

Dr. S. Husain Zaheer: We already have many decisions which are executive decisions. It is the overall well-being of the industrial development and also of the country which is involved here and Government, I believe, is fully justified in taking authority into its own hand to take a decision in public interest.

Dr. C. B. Singh: You agree that in the present state of advancement we are in need of foreign capital for our advancement. Do you agree or you do not agree?

Dr. S. Husain Zaheer: I think we do need for investment, but it should be on mutually agreed conditions.

Dr. C. B. Singh: But you agree to the need for foreign capital here. Don't you?

Dr. S. Husain Zaheer: Yes, but perhaps not in the fields which I have enumerated.

Dr. C. B. Singh: That is in drugs, chemicals, food stuffs.

Dr. S. Husain Zaheer: Broadly 'No'.

Shri M. R. Shervani: You have stated that industrial development has been retarded by the existing patent law and the present one, although an improvement on the same, is a sort of compromise. May I ask if you could suggest as a further inducement to industrial growth that the 10 years term be reduced to 7 years in drugs. I will explain it. In our Bill, we have given a 10 years period as the life of the patents on drugs and food stuffs. In view of your definite opinion that patent system retards industrial growth and research, would you recommend reduction from 10 years to 7 years?

Dr. S. Husain Zaheer: I am personally in favour of that.

Mr. Chairman: Shri Chettiar:

Shri R. Ramanathan Chettiar: In view of the pre-judged views of the learned witness, I, as a protest, am not participating.

Mr. Chairman: That is all right.

Dr. S. Husain Zaheer: What is the pre-judged view? I have given it in writing.

Mr. Chairman: He is not a Member of Parliament.

Shri R. Ramanathan Chettiar: He has not given in writing.

Mr. Chairman: In the Memorandum, he has said he is against all.

Dr. S. Husain Zaheer: The whole purpose of this meeting is that I have been called to give my views.

Mr. Chairman: That is his view. You may or you may not accept it.

Shri B. K. Das: There are other witnesses who have also said that. I do not know what objection my friend is taking. Dr. Zaheer, you have said in your Memorandum on page 15 that "reference to CSIR may be excluded from the definition of clause 2(1)(h) unless the original clause 41(10) referred to above is restored". Would you kindly explain this? What is the difficulty?

Dr. S. Husain Zaheer: Sir, we are a registered society of the Government and we would not like to exercise the authority of Government. It is the executive body of Government which should exercise that authority. They can ask for our advice and we will be very happy to give that and in fact it is our duty to do so.

Mr. Chairman: It is included there as Government undertaking. You are considered part of the Government. Your institution is tried to be included as a Government institution like hospitals, like universities. You have got any objection to that?

Shri R. B. Pai: There are certain penal provisions in the Bill under which if the Controller General asks for some information about the extent of exploitation and the Officer In-charge of Government undertaking is not able to satisfy him, then he is liable to be imprisoned. There are some penal provisions like that. That is one thing which we will be calling upon ourselves by being included in the Government undertakings, whereas we do not see any corresponding advantages by that inclusion. Formerly we had requested that we may be included as a Government undertaking, because there was a provision in the draft bill at the earlier stages that Government undertakings would be excluded from the application of provisions regarding compulsory licences, which would have been very advantageous for the Government undertakings.

Mr. Chairman: You refer to the original clause 41(10).

Shri R. B. Pai: I suppose so. That clause has been removed. There is really no benefit in being a Government undertaking. At the same time, we would be liable to this.

Shri B. K. Das: On page 16, you say the method of testing should be made patentable. Will you kindly explain this?

Shri R. B. Pai: We had a very good invention from the Central Leather Research Institute for a microscopic method of testing the wool to find out whether a particular sample of wool is good or bad. By chemical treatment followed by just looking into the microscope, we could vividly see picturesquely whether the sample was good or bad. That was a method of testing and a very meritorious invention. But under the existing law we could not patent that invention. Methods of testing can be very useful industrially. Just as a

process can be useful, a method of testing is also a type of process which is industrially useful and such processes are patentable in U.K.

Mr. Chairman: Are there any other countries?

Dr. S. Husain Zaheer: In the U.K. it is patented.

Shri R. P. Sinha: I will like this to be noted. If there is something which is used in the United Kingdom, that method should be looked into. We should incorporate that also.

Shri B. K. Das: That process includes testing also.

Dr. S. Husain Zaheer: Yes, Sir.

Shri Sham Lal Saraf: Mr. Zaheer, in the present state of development in our country it is an established fact that unless you get the knowhow or encourage research and inventive capacity in the country, perhaps the country may lag behind. Now keeping that in view and also keeping your views in our sight that you are absolutely against getting things patented, may I know what other ways would you suggest that would help in creating scientific knowledge within the country successfully?

Dr. S. Husain Zaheer: I think, Sir, that the progress in our scientific and technological levels has been quite adequate to supply the requirement of the country in these fields—chemicals, pharmaceuticals, agricultural chemicals, food, etc., these particularly. I would also, however, point out one thing, Sir, and that is that authorship certificate may be permitted to encourage further indigenous scientific work in the country.

Shri Sham Lal Saraf: That is quite a separate subject to be dealt with. But here I would like to know that keeping the present progress made in these pharmaceutical, chemical, food, processing industries in view, may I know if Dr. Zaheer is aware as to what percentage of it has come under

the Patent Law or has been registered under the Patent law?

Dr. S. Husain Zaheer: Sir, more than 90 per cent are foreign patents. And major products—some of which I may name, Sir, like Chloromycin, Tetracyclin, Tolbutamide—and even the intermediaries of these are covered by patents.

Shri Sham Lal Saraf: The hon. witness has not caught my point. As far as manufacture is concerned, what percentage of it has come under the Patent Law? I could say it is hardly 2 per cent. Therefore, 98 per cent of it is absolutely free for people to manufacture. 2 per cent of the lot are very important to life-saving drugs. I would ask Dr. Zaheer whether he knows of any inventive institutions that would go to help the country by manufacturing all the types of these life-saving drugs?

Dr. S. Husain Zaheer: We would certainly be able to develop process which can make these life-saving drugs. We may not be able to invent new life-saving drugs and if incentive and encouragement are given that will probably encourage to develop life-saving drugs.

Shri Sham Lal Saraf: I would like the hon. witness to tell us what incentive would he recommend to be given to scientists?

Dr. S. Husain Zaheer: The main thing is the development of a healthy indigenous industry free from the obstruction of patents which will itself be an inducement for scientists to assist and help these industries and they will become part of the industry itself. It will give them necessary encouragement and the excitement for better work and hard work.

Shri Sham Lal Saraf: May I ask the Director-General, CSIR, in these physical laboratories all over the country, so far how many such inventions have they found out which are patent or non-patent that have been translated

into practical work, whether in the factory or in the field? Would he be able to tell us?

Dr. S. Husain Zaheer: Sir, the investment of the scientific effort which is required for progress in original type of drug research is not adequate in the country. It is not comparable to what is being done in a country like Japan. Japan has attained a certain very great degree of self-sufficiency in this because of bigger investment and because of non-existence of patent laws.

Shri Sham Lal Saraf: There is a patent law in Japan.

Mr. Chairman: The patent law is there in Japan for a number of years. That is what the witnesses who came before us, told us.

Dr. S. Husain Zaheer: Sir, there is a general expectation that foreigners could not expect patent protection in Japan, and it is only recently that the situation has changed somewhat. They were allowed freely the utilisation of foreign know-how in the country. But the reply to the hon. Member on my right, as I have said in the beginning, is that discoveries of new drugs in the country have been almost nil. But the development of knowhow processes where patents have expired or where patents have either been bought or licensed, have been done in collaboration with people who have taken patents. There is one case where an entrepreneur developed the know-how at the National Chemical laboratory of a very important dye. He was threatened by the foreign patent-holder for prosecution. He went ahead and he said, 'All right, you can threaten me but still I will go ahead. I want to be in a position where I can bargain with you better'. He went ahead and eventually this patent-holder had to sell his patents to him and this material is being made by the Indian partner.

Shri Sham Lal Saraf: The hon'ble witness has said that today we are not rich in the know-how and secondly

we are not in a position to manufacture life-saving drugs because the reasons are obvious. How does he propose to bring this country in line with the rest of the countries in the world who have gone far ahead of us in the scientific field?

Dr. S. Husain Zaheer: I am sure, taking two or three important drugs, for instance, Chloromycin, Tetracyclin and Tolbutamide, within a very few months we will be able to develop indigenous know-how to make these life-saving drugs irrespective of the Patents.

श्री ब्रज बिहारी मेहरोत्रा : सी० एस० ग्राई० ग्रार० में जो रिसर्च हो रही है इंडिजनस मंडीसिस के लिए तो क्या इसलिए कि पेटेंट के मुआफिक नहीं है और चाहते हैं कि नो हाउ लोगों के पास पहुंच सके और उससे लोगों को सस्ते में फायदा पहुंच सके ?

डा० एस० हुसैन जहीर : जी हां एक वजह यह जरूर है ।

श्री ब्रज बिहारी मेहरोत्रा : दूसरी चीज मैं यह पूछना चाहता हूं कि यह जो इंडिजनस मंडीसिस के बारे में आयुर्वेद और यूनानी मंडीसिस के बारे में रिसर्च रही ही है उस में आपको आयुर्वेद की और यूनानी किताबों की फर्स्ट हैंड नौलिज मिलती है तो क्या यह अच्छा नहीं होगा कि आयुर्वेद के और यूनानी हिफमत के वहां जो साइंटिस्ट्स हों वह भी रखे जायें आपके इंस्टीच्यूट में उससे बहुत फायदा होगा ?

डा० एस० हुसैन जहीर : जहां तक आयुर्वेद और यूनानी मंडीसिस के विद्वानों का ताल्लुक है उनसे हमारा ताल्लुक हमारा रात्ना बहुत करीबी हो गया है लखनऊ में लेकिन साइंस के तरीके और मॅथड्स एक हैं और उनमें हमारा कोई तफरका नहीं कर सकते चाहे वह यूनानी हो, आयुर्वेदिक हो या एलोपैथिक मंडीसिन हो अगर वह साइंसी तरीका अखतयार करते हैं और साइंटिफिक थिंकिंग के मुताबिक काम उनका हो तो वह साइंटिस्ट्स

हो जाते हैं और उनकी जगह जरूर हो जाती है ।

श्री ब्रज बिहारी मेहरोत्रा : शायद मैं अपने सवाल को साफ़ नहीं कर सका । क्या आपके यहां जो साइंटिस्ट्स हैं उन में ऐसे साइंटिस्ट्स भी होंगे जो खुद आयुर्वेद के विद्वान हैं यूनानी के विद्वान हों और साइंटिस्ट्स भी हों तो फर्स्ट हैंड नौलज ज्यादा कारामद होगी आप के सी० एस० आई० आर० के लिए ?

डा० एस० हुसैन जहीर : ठीक बात है । एक ऐसा इंस्टीट्यूट खास तौर से आयुर्वेद दवाओं के लिए कायम किया है जामनगर में और उस से हमारे लखनऊ के इंस्टीट्यूट से बहुत काफ़ी और करीबी के ताल्लुकात हैं ।

श्री ब्रज बिहारी मेहरोत्रा : मैं यही पूछ रहा था कि क्या यह जरूरी नहीं है कि ऐसे एक दो इंस्टीट्यूशंस हों ?

डा० एस० हुसैन जहीर : मैं बिलकुल आपकी राय का हामी हूँ ।

श्री ब्रज बिहारी मेहरोत्रा : आपके सी० एस० आई० आर० में अगर आयुर्वेद और यूनानी के विद्वानों को भी रखा जायेगा तो उनकी फर्स्ट हैंड नौलज आपको ज्यादा यूजफुल साबित होगी ।

डा० एस० हुसैन जहीर : आप बजा फरमाते हैं । वहां हर किस्म के साइंटिस्ट्स हों चाहे वह आयुर्वेद के हों यूनानी के हों या एलोपैथी के हों और ऐसा होना जरूर कारामद साबित होगा ।

श्री ब्रज बिहारी मेहरोत्रा : शुक्रिया ।

श्री विभूति मिश्र : आयुर्वेद में चाहे यूनानी में जमाने दराराज से दवाओं के फारमूले लिखे हुए हैं । उसकी खूबी यह है कि जो उन जड़ी बूटियों को लेकर उचित ढंग से औषधि तैयार करे तो दवा ठीक उतरती है

उसी तरीके से यह पेटेंट्स हैं जो पेटेंट कराते हैं तो पेटेंट की जो इनप्रीडियंट्स और कम्पाउंड्स हैं उन को उसी तरीके से लेकर ढंग से अगर बनायें तब वह दवा ठीक तरीके की निकलेगी । आज तक आयुर्वेद या यूनानी में किसी ने पेटेंट नहीं कराया लेकिन हजारों लाखों वर्ष से वह दवाएं चल रही हैं बाकी आज यह पेटेंट की प्रथा चल गई है जिसमें एक आदमी को एक मोनोपली दे देते हैं जो कि मेरी समझ में तो मुल्क के लिए नुकसानदेह है लेकिन मैं जानना चाहता हूँ कि आपकी राय उस बारे में क्या है ?

डा० एस० हुसैन जहीर : मैं बिलकुल माननीय सदस्य से उस में सहमत हूँ ।

श्री विभूति मिश्र : इसके मानी यह है कि आप पेटेंट के कानून के खिलाफ़ हैं ?

डा० एस० हुसैन जहीर : जी हाँ ।

श्री विभूति मिश्र : मैं जानना चाहता हूँ कि जिस समय सरकार इस पेटेंट कानून को लाई उस समय उसने आपकी मिनिस्ट्री से या आप के डिपार्टमेंट से कंसल्ट किया था ?

डा० एस० हुसैन जहीर : हम ने अपनी तहरीरी राय पेश कर दी थी और आपकी जो राय है उससे वह बहुत मिलती जुलती है ।

श्री विभूति मिश्र : सरकार की तरफ से जो लोग इस बिल को लाये हैं मैं उनसे पूछना चाहता हूँ कि जब साइंटिस्ट्स की राय इस पर इस किस्म की थी तो वह आखिर कौन सी जिम्मेदारी पर इस पेटेंट बिल को आगे लाये हैं ? यह मैं आप से नहीं पूछता हूँ ।

Shri P. S. Naskar: That we shall discuss among ourselves. You may please ask the questions to the witness now.

श्री विभूति मिश्र : अब तक जो पेटेंट का कानून रहा है और हिन्दुस्तान में जो आगे बनेगा उससे दवाएं सस्ती रहेगी या महंगी रहेंगी ?

डा० स० हुसैन जहीर : अब तक जो रहा है उसकी वजह से दवा महंगी रही है बाकी अब जो तृजवीज पेश की जा रही है उससे मुझे उम्मीद है कि दवाओं की महंगाई में कमी होगी ।

श्री विभूति मिश्र : हिन्दुस्तान एक गरीब देश है और यहां प्रति व्यक्ति आमदनी का औसत बहुत कम है 20 या 25 रुपये के करीब है तो ऐसे लोगों के लिए आप के पास इस पेटेंट बिल में कुछ सुझाव हैं जिससे इस देश की गरीब जनता को सस्ते दामों पर दवाएं सुलभ हो सकें ?

डा० एस० हुसैन जहीर : मेरी राय है कि सरकारी बिना पर नेशनल ड्रग्स जो कि खास तौर से लाइफ सेविंग चीजें हैं वह सरकार द्वारा नेशनल स्केल पर न बननायी जायें और यदि ऐसा किया जाता है तो दवाओं की कीमत कम होगी ।

श्री विभूति मिश्र : हम लोगों ने प्रूम फिर कर इस समस्या का अध्ययन करने का प्रयत्न किया है । जो दवाएं बनाने वाले हैं वह कहते हैं कि बाहर से हमारे पास चीजें आती हैं जिनके कि कारण दवाओं के दाम यहां पर ज्यादा बढ़ जाते हैं तो क्या आप कोई ऐसा सुझाव दे सकते हैं कि बाहर से जो यह दवाएं आती हैं उनके बदले यह कम्पोजिट चीजें यहां इस तरीके से मिल जायें ताकि हिन्दुस्तान की जनता को सस्ती दवा मिल सके ?

डा० एस० हुसैन जहीर : जी हां सिर्फ 50-60 दवाएं ऐसी हैं जो कि वाकई जरूरी और लाइफ सेविंग कही जा सकती हैं बाकी जो हैं वह सिर्फ कम्पोजिट मिक्सचर्स हैं लेकिन आपने जो सवाल किया है कि इन दवाओं के बनाने में जो इंटरमीडियरी दरमियानी चीजें

लगती हैं वह भी हम फिलवक्त नहीं बना रहे हैं बाज उन में से पेटेंट के भी अन्दर है और हम उनको बना भी नहीं सकते । हम उन्हें बना नहीं रहे हैं वह चीजें भी हमको बड़े ऊंचे दामों पर हमारे हाथों में बेची जाती हैं जिसके माने यह होते हैं कि जो प्रोडक्ट्स हम बनायेंगे उनको इम्पोर्ट करके बनायेंगे तो उनकी कीमतें लाजिमी तौर पर ऊंची रहेंगी । यह पेटेंट बिल अगर मंजूर हुआ तो उसका लाजिमी नतीजा होगा कि हमको वह चीजें अपने देश में बनानी पड़ेंगी और हम उनको सस्ते दामों पर बना सकेंगे ।

श्री विभूति मिश्र : चंडीगढ़ में एक फाइजर नाम की दवाएं बनाने वाली कंपनी है उसकी 90 लाख या उससे ज्यादा की पूंजी लगी हुई है । उस का हिसाब हमने देखा है तो मालूम हुआ है कि 30-35 लाख रुपया साल में उसको नेट प्राफिट होता है । अब इस तीस लाख की वह बाहर से दवाएं मंगाते हैं तो क्या आप ऐसा नहीं सोचते हैं कि हम यहां स्वयं अपने वहां दवाओं का इंतजाम करें ताकि वह किसी विदेशी कारपोरेशन से दवाएं लें हिन्दुस्तान में स्वतः यहां के आदमियों को दवाएं बनाने का अधिकार दें ?

डा० एस० हुसैन जहीर : मेरी यह राय होगी कि इन्हें अपनी देसी आदमियों से बनवायें ।

Shri K. K. Warrior : I understand that the CSIR have been in the earlier days taking more patents but they have discontinued that in the later period. Is there any cogent reason for that?

Mr. Chairman : They do not want any patent now.

Dr. S. Husain Zaheer : As long as the Patent system exists we are also taking patents but we are much more strict now than we were about four or five years ago. But we are very much stricter than we were about four or five years ago. We first assess the

value of the patents and then we go in for patenting. Formerly we had no idea or no new thought about this. Thereafter a little improvement was made. We used to go in for our own Indian patents. This tendency we are trying to discourage.

Shri K. K. Warior: We are given to understand that even now the C.S.I.R. have got certain processes which they are not willing to get them patented although the process is entirely new and it is valuable novelty.

Dr. S. Husain Zaheer: In spite of our strict control, the number of patents that we took over was very much considerable. Last year we took about 115.

Shri B. K. Das: You are in favour of the C.S.I.R.'s continuing to act as patent Agents and this is what you have stated in your memorandum on page 4.

Dr. S. Husain Zaheer: Yes, Sir.

Mr. Chairman: Do you want your Patent Officer to act as an agent for foreign firms for the assessment of the value?

Dr. S. Husain Zaheer: My colleague will answer this question.

Shri R. B. Pai: In Russia, we have the Chamber of Commerce which acts as the patent agents for foreigners who want to take out patents in Russia. This is on an obligatory basis. Now, there is a suggestion that since the C.S.I.R. have got its own patent unit for helping the scientists to take out patents, we can extend this service to foreigners so that the foreign exchange which now goes from India as patent fees to patent attorneys who are of foreign nationality can be earned by us for our own country.

Mr. Chairman: Do you want the foreign patents to route through you?

Shri R. B. Pai: We do not want that to be routed through us on a

compulsory basis. But, we can do that on a voluntary basis. We can do that to start with.

Shri B. K. Das: Your idea is that in that way you will be helpful to the foreigners and some foreign exchange earnings will be there in the whole to trade.

Dr. S. Husain Zaheer: The idea is no doubt to earn foreign exchange.

Shri Shyamnandan Mishra: I am not quite sure whether my questions have already been covered. However, one or two questions occur to me just now. Firstly, since the C.S.I.R. are concerned with research and development primarily, would they be good enough to tell us what steps they have taken to see that when a particular drug industry is not in a position to undertake the research on its own, the C.S.I.R. undertakes the research and development on the basis of a kind of united effort in a few units?

Dr. S. Husain Zaheer: We have proposed this to the Indian Pharmaceutical Manufacturers Association to form a Research Association actually two days ago when I was in Bombay. Speaking with their representatives, they said that the nature of their operations undertaken was such that they were inhibitive from taking a cooperative research. But, still, they want to do this. On the other hand, there are now parties who are coming to some of our own laboratories and sponsoring research in our laboratories and paying for them; but, they are managed on an individual basis and not on a team basis. But, I understand that a group of pharmaceutical manufacturers in Bombay comprising of four or five parties is considering to take this up.

Shri Shyamnandan Mishra: Here, my point is this. Suppose the individual units take a stand that they could not do this on a cooperative basis. Would it not be possible for the C.S.I.R. to undertake the research

on their behalf on the basis of making a matching contribution which the Government is always willing to share?

Dr. S. Husain Zaheer: An effort has been made to form a research association. We will give them 50 per cent of their expenses that they spend. But, they have not yet formed their association to undertake that job. However, they are coming to our existing laboratories and asking us to work for them on payment.

Shri Shyamnandan Mishra: Would it not be possible to make it a compulsion that they should make some contribution?

Dr. S. Husain Zaheer: That was the recommendation of the Scientists and Industrialists. We are actively pursuing that with the Ministers of Finance and Commerce and Industry.

Shri Shyamnandan Mishra: Let me ask about the foreign collaborations which are occurring just now. Whether the C.S.I.R. is convinced that if these foreign collaborations which are taking place just now are permitted to take steps in the same way, then there would be many unnecessary patents also taken out in India. Are the foreign collaborations in any way responsible for many patents to be taken out in India which may not be considered necessary?

Dr. S. Husain Zaheer: Yes, Sir. 90% of the patents in India are of foreign patents. It reacts and that leads to foreign collaborations. I can tell you as an example Tetracycline. It is covered under patent. We have to go to a foreign party if we want to make this drug in our country either by buying that or by persuading them to come here to set up a unit for this purpose.

Shri Shyamnandan Mishra: What is particularly important is that in the name of import substitution, at the

moment, unnecessary things are being produced in India and many foreign collaborations are taking place. The term 'import substitution' is so fashionable that under this term, many things are being done in this country. Whether the C.S.I.R. has a particular role to play in this regard and whether they consider it necessary or not when many patents are being taken out in India because of foreign collaborations which are not necessary to-day. We are incurring a loss in terms of foreign exchange because of this.

Dr. S. Husain Zaheer: I am quite in agreement with you. When foreign collaborations take place, they must be closely scrutinised by technical people, by economists and by competent people who are able to give their unbiased and objective view on the necessity of such foreign collaborations.

Shri Bibudhendra Mishra: Has there been any case where the technical know-how has been taken by some party—I do not exactly remember the name of the party—from one of the national laboratories which subsequently has been found to be not workable.

There have been cases where it has been workable, e.g., Vit C. Are there any case in the negative?

Dr. S. Husain Zaheer: The actual passing over of the know-how after a process has been patented is not done by CSIR but is done by the National Research Development Corporation which is not a part of CSIR. It is a separate society. Just at the moment the Director-General of CSIR happens to be the Chairman of that Corporation. My personal view is and I have also tried to persuade the NRDC as Chairman at a Board meeting that before we pass on the know-how and before we receive any lump sum royalty we must ourselves ascertain that the process is commercially workable.

Mr. Chairman: That is being done now?

Dr. S. Husain Zaheer: It is being done now very strictly and I would say in recent years any case of the type that you are mentioning is not most likely to occur. Earlier there was one case of aluminising which was a very important one where one of our laboratories has claimed and they have done a very good work and they sold it. There was one other case of manganese where we received a fair amount of royalty. But on close examination we found that it still required to be done. Therefore we have withdrawn our objection for holding up their work till we complete the know how and in another six months we feel we will be able in a position to say, 'We are now ready and go ahead'.

Mr. Chairman: How many of your processes have been patented and accepted by the industry in India?

Dr. S. Husain Zaheer: About 150—200.

Mr. Chairman: Industrially?

Dr. S. Husain Zaheer: About 150—200 patents have been licensed and about 80 are in production.

Mr. Chairman: Is there any liaison between the industry and your Department?

Dr. S. Husain Zaheer: We have taken very active steps in that direction. During the last few years there is a complete Directorate for liaison and co-ordination which establishes very close connection with the industry, in taking problems from them for research and in passing out our completed process to them and helping them and we have also established a design and engineering unit which helps the laboratories as well as the entrepreneurs who take our licenses to work out these processes so that these can be commercially exploited. We have formed also in collaboration with the Chemical Manufacturers Association a liaison bureau one of which works in Bombay and the other one

is in Calcutta. We are in close touch with the Chemical Industry—taking out problems from them for research in the laboratories and passing out our know-how to them for exploitation.

Mr. Chairman: All the three organisations, viz., The CSIR, Defence Research Organisation and the National Research Development Corporation—are working in close collaboration with each other or is there anything to be desired?

Dr. S. Husain Zaheer: There is so much to be desired for close collaboration.

Mr. Chairman: What are the methods you would suggest?

Dr. S. Husain Zaheer: We have taken some steps to have this collaboration. For example, the CSIR has organised a special unit which we call the Defence Co-ordination where we try to coordinate not only with the Defence Research Organisation but with scientific and technological problems of defence which we have and we can offer solution to them in our laboratories. During the last 3½ years we have actually taken nearly 175 problems and 84 of them have been solved and given over to them for exploitation. Similarly with the industries. The NRDC is a very small organisation really but the Corporation is established by having the present Director-General of CSIR as the Chairman and a number of Directors of the Laboratories of the CSIR are members of the Board of NRDC. Therefore we have close collaboration with the industry. In the 8 corporate industries we have very close collaboration, viz., textiles, cement, tea, synthetic fibres, jute. There we have close collaboration and also we give representation to the Defence Science personnel in our executive councils and our Scientific Advisory Committees of the laboratories which formulate the research programme of the laboratories. So, in that way we are trying to get together, but I am afraid I am not satisfied with it. It should be much closer than this.

Mr. Chairman: Am I right when I say that all the National Laboratories are working under the CSIR?

Dr. S. Husain Zaheer: That is the name given. Of course apart from National Laboratories there are other laboratories which are not called National Laboratories but which are also working under the CSIR. We have got 34 institutions and 8 corporate institutions.

Mr. Chairman: Is there exchange of notes about the work done by each laboratory, for e.g., as between these laboratories and the NRDC and the Defence Research Organisation so that there is no overlapping?

Dr. S. Husain Zaheer: One of the foremost functions of our own co-ordination and liaison unit is to keep a record of the scientific work going on in the different laboratories and when there is parallel overlapping work or work of similar type it is the duty of this organisation to bring the scientists from these different units where similar type of work is being done. For e.g. solid state physics and ferrites—there are 2 or 3 laboratories working on them. We bring them together and under the inspiration of the co-ordination unit the problems are discussed in all broader aspects and framed out depending upon the availability of equipment and scientists. They meet every year to discuss the progress made. But the NRDC itself does not do any research work at all. Actually it is only a very small office—with an executive director, a Secretary and a few clerks and only they peddle our processes and get the licence fee. Their work stops there. I think that is unsatisfactory. As I said earlier, they ought not to peddle our processes unless they have got a machinery and they are themselves convinced that those processes are workable.

Mr. Chairman: You told the Committee that you are against patents for chemicals and articles of food. But you know that one of the inven-

tions in the Pimpri factory is Hyamycin and they have taken out a patent in America and they are getting Rs. 7½ lakhs royalty. If patents are abolished, anybody would be then free to use the processes and inventions that your scientists have made. Would it not be a disincentive to scientific inventions?

Dr. S. Husain Zaheer: I have made it clear that I would not advise abolition of patents in the United States. It is the state of our economic development which induces me to recommend that patents here should be abolished in these fields. I would be against taking a patent for Hyamycin in India but I would not be against taking a patent for it in the United States.

Mr. Chairman: If you are not willing to give protection in your own country for your scientists how can you ask for protection in another country?

There will be double-dealing. You must have some standard.

Dr. S. Husain Zaheer: We want another type of protection or inducement or encouragement, that is, diverting our attention to find out processes of manufacturing cheaply and economically medicines which are to-day covered by patents. Our gains will be much more at the moment by not allowing patents....

Mr. Chairman: If there is no patent law, anybody will be free to utilise your inventions anywhere in the world. How do you protect it?

Dr. S. Husain Zaheer: I have not the power to recommend that patents should be abolished in the United States....

Mr. Chairman: No, no; if we abolish the patent law here, anybody from U.S.A. or U.K. or Germany can exploit your invention and manufacture it in their country and also in this country.

Dr. S. Husain Zaheer: As long as they manufacture in this country, I

would have no objection at all. I would certainly be free in selective cases to take a patent where the patent system exists even though I may not take a patent here. As I mentioned to you, the agreements which we have arrived at with some American firms to utilise and patent our discoveries and inventions will apply to the whole world but not to India.

Mr. Chairman: I want to know how you are going to protect your own scientists here. They will exploit their inventions in India.

Dr. S. Husain Zaheer: I have suggested the authorship system. Even then, numerically, the number is so small that it is insignificant. Ninety per cent of the patents are foreign patents. The gains you will get in utilising these 90 per cent of patents will outweigh the losses which you might suffer in not having patent protection.

Mr. Chairman: You yourself said that you have taken 1,200 patents.

Dr. S. Husain Zaheer: All of them are not in the field of drugs and pharmaceuticals.

Mr. Chairman: May be. Patents give protection for a particular period to the inventor to exploit his inventions. If you don't have any patent, anybody can come and exploit them.

Dr. C. B. Singh: If the SCIR does not patent a thing, somebody else will get it patented. As long as the patent law is there, it is better to get them registered as patents.

Dr. S. Husain Zaheer: We are compelled to do so, as long as the patent law is there.

Mr. Chairman: You say "the system of utilisation of CSIR patents approximates to the Authorship system. It is felt that the CSIR system should be extended to Indian inventions in general." What is the system you are following now?

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Shri R. B. Pai: The idea of the Authorship Certificate is that the exclusive privilege will vest with a statutory body or with the Government. Now the inventors take out patents here. But the patents are taken out in the name of the Council of Scientific and Industrial Research which is a public registered society and also a statutory body. Now no one can blame the CSIR for exercising its monopoly privilege in a way that is not conducive to public welfare. So the idea that we suggested is that if we have the Authorship Certificate system, the inventor will get an authorship certificate but the monopoly will not rest with him. There won't be a private monopoly, but the State will take over the patent and exploit it and just as the CSIR does, give the inventor a liberal amount, say, Rs. 40 out of every hundred rupees....

Mr. Chairman: It does so at present?

Shri R. B. Pai: Yes. We can have the same sort of thing for drugs and pharmaceuticals also. For instance, we can say 'we won't give you the ordinary type of patent, but we will give you an authorship certificate so that the exclusive privilege rests with the Government and the patent may be exploited by the Government. If it is a profitable work, we will give a proportionate share of the value of the social utility of the patent to the authors, or if he has assigned it to a manufacturer, to the manufacturer or whoever steps into the shoes of the author.' In this way, the patent can be used in the best interests of the country. There may be exclusive licences, there may be non-exclusive licences as we are doing it. We may grant it to a public body or to a private manufacturer. The freedom will be there and the discretion in every case will be exercised by a statutory body. That is the idea.

Mr. Chairman: On page 17, you have said "...patents should be granted for other plant inventions

such as a sexual reproduction (e.g., by techniques such as grafting, budding, cutting, layering, division and the like) of new varieties of purely commercial plants, ornamental trees, flowers, bushes, hedges, etc." Is it prevalent in any other country?

Shri R. B. Pai: Yes, Sir, the plant patent system prevails in the U.S.A. and now there has been an international agreement between the U.K. and some other countries where new species of plants are granted a special protection. So this is an important field where our workers in the field of agricultural science will have a scope to practise new ideas in the field of generating new species of plants or biological inventions.

Dr. S. Husain Zaheer: There is a rose-breeder in England whose annual income from royalties is over £10,000. He gets, I think, three shillings on every rose plant which he has bred. We will have no objection to ornamental trees, but the commercial side should be protected with patents.

Mr. Chairman: You say on page 24, "the practical difficulty of making a world-wide search has already been referred to. Novelty should be judged only with reference to what was known in India on the date of the patent." Is that method prevalent in other countries also?

Shri R. B. Pai: In a very large number of countries. I think it is prevalent in U.K. and all Commonwealth countries: There novelty is judged in the light of what was public knowledge, what was publicly known, in the country on the date on which the patent application was filed. This is a very economic system as compared with the American system where they go in for a world-wide search with a huge army of examiners. A tremendous amount of expenditure is incurred by the Patent Office, but still they are far from being able to catch up with the terrific pace of technology in the world. In any case, if a person in India makes an

invention and somebody might have made it in a very remote part of the world and the information may not have reached this country at all. So why should this patent be invalidated? He has given some new knowledge to this country. Therefore, this should be patented.

Dr. C. B. Singh: There is a possibility that he might have copied it and brought it over here.

Shri R. B. Pai: If the knowledge has reached this country, then he has done a service to this country by bringing this knowledge promptly and disclosing it to our country.

Dr. C. B. Singh: But the one who first got it patented will object to it; won't he?

Shri R. B. Pai: That will be the case if we adopt the world system. But the system which is now worked in England and in many other Commonwealth countries is that the knowledge is judged by what was known in the country on the date the patent application was filed.

Mr. Chairman: That means stealing somebody else's property.

Dr. S. Husain Zaheer: They are stealing only if it is known in the country.

Shri B. K. Das: Search should be of knowledge available in the country, not outside India, as has been provided here in the Bill.

Dr. S. Husain Zaheer: Outside knowledge also if it has reached India becomes Indian knowledge.

Mr. Chairman: On page 31, it is stated penal clauses require revision to ensure that bonafide inventors are not discouraged from filing patents. What is your suggestion for this?

Shri R. B. Pai: If the idea of Patent law is to encourage the inventor and to give him protection and a pat on

the back, he should not be threatened with imprisonment for not furnishing whatever information the Controller may ask for. As worded, the Controller is free to ask for anything—there is no strict limit to what he may ask for—and if the inventor fails to provide that knowledge within a few weeks, it is stipulated that he could be sent to the prison. This may deter a large number of inventors from applying for a patent at all. It may be much better to keep it a secret and try to exploit it as a secret process or just publish it and not to bother to take out a patent.

Mr. Chairman: What are the functions of a Patents Officer in the C.S.I.R.

Shri R. B. Pai: To help our inventors to take out patents.

Dr. S. Husain Zaheer: Something similar to Public Patents Attorney, a kind of internal patents officer who drafts our patent applications, who checks up whether the application is right or not.

Mr. Chairman: Recognised as Patents Agent also?

Dr. S. Husain Zaheer: For other parties also.

Mr. Chairman: We have introduced a clause in the provisions regarding Patent Agents that whoever wants to be a patent agent should have some Degree in Science or Engineering. Does it in any way affect you?

Shri R. B. Pai: I am not in favour that provision so far as Degree is concerned. Let us take the most advanced country—U.S.A. for instance. What is required is that the man who wants to practice as a patent agent should have the necessary legal and scientific background. This is interpreted in U.S.A. to mean that if a man has his name entered in the Bar of a District Court of a State Court—he is a Barrister—he is pre-

sumed to have the necessary academic scientific background. Apart from that let us take the case of the U.K. There are provisions which say 'if a man has worked in a patent agents' firm and is over 25 years, he is an experienced man in the line and they do not bother about this Degree at all. This is for the first time that such a provision is being brought in this country and there are very competent and experienced patent agents who have been in the line for over 25 years nearly, they have got the necessary technical and scientific background by working in collaboration with inventors. We should not be very rigid about this.

Shri K. K. Warrior: Have you come across a similar provision in any other country?

Shri R. B. Pai: I am not aware. I think there is no country in the world where a Degree in Physical Science or Engineering is regarded as an essential qualification. I have tried to look into this matter. There are two things—one is for the new entrants. For that Australia is one of the countries where they insist on a technical degree. But taking the case of people who have already been in the line, there is no country in the world which would debar a man from registration just because he does not have a degree. If we admit a raw graduate to become a patent agent, the idea of excluding a man who has been in the line for 25 years, who has done brilliant work, whose work is appreciated, is not reasonable.

Dr. S. Husain Zaheer: Some safeguard to protect such people who have attained efficiency through actual practice over a certain period of years, we suggest, would be desirable.

Shri B. K. Das: For new entrants?

Dr. S. Husain Zaheer: Perhaps, you can.

Mr. Chairman: Do you think there is sufficient arrangement for basic re-

search in India in the laboratories under your control. You know all process research is a result of basic research.

Dr. S. Husain Zeheer: We are not equipped properly for some sophisticated type of research like space research, or some very expensive type of nuclear and atomic research, but for other types, I think our Indian laboratories are reasonably well-equipped. Some of the University laboratories also, but not all. My personal view is much more basic research is required to be done, particularly in the Universities, especially in fields like Mathematics and things of that type. CSIR is specially convening a conference in October where we are inviting brilliant mathematicians from all over the world who have spread out and gone away to come and discuss with us and recommend to us what method should be adopted to encourage the study of Mathematics and mathematical research in the country, because we feel this is the basis of all physical research. For actually all types of science, Mathematics is the basis.

Mr. Chairman: Is there close liaison between the University CSIR and the University Grants Commission?

Dr. S. Husain Zaheer: There is no formal liaison with the University Grants Commission. Our Reviewing Committee had recommended formation of a Liaison Committee between the University CSIR and the University Grants Commission, but the University Grants Commission was not particularly favourable to that idea. Because of the reluctance from the U.G.C., we have dropped the idea of forming a formal committee. We have got a kind of Expert Committee on which representatives of CSIR and some University Science Professors sit together and advise us how collaboration could be developed. But there are any fields—for example about 70 per cent of scientific research in the Universities is financed by the CSIR—these schemes of research are approv-

ed by Research Committees of the CSIR where predominantly professors from the Universities are members. It is they who sanction research schemes in the Universities. Then we give a very large number of research fellowships which are mostly in the universities—nearly 80 per cent are in the universities. These are meant to induce people to take up science as a career and for training in research, because we feel that unless brilliant students take science as a career and get training in research, our talent will be dried up. Also a number of CSIR laboratories are recognised bases for Ph.D. work and also a number of CSIR laboratories actually do regular teaching work in special branches of technology for neighbouring universities.

Mr. Chairman: What is the progress that the CSIR has made in its laboratories regarding import substitutes and export promotion.

Dr. S. Husain Zaheer: We have tried to reorient all our programmes. We must say that to some extent we have attained success. But we are still moving forward. After all, I do not want to be in the defensive, but I feel that science is rather new in India and at least the interest in the investment in science is even now not quite adequate. It is something about which we may not feel complacent but we cannot also feel apologetic. I think we have, on a rough calculation which was made about two years ago, saved the country about 22 crores of foreign exchange, which, of course, is not very much, considering that our annual budget now is Rs. 17 crores. But still it is only indicative of the manner in which we are moving forward and we feel that if we make this calculation four years hence this figure would be more than doubled.

Mr. Chairman: How are these problems taken? Are they referred to by the Ministry or the laboratory takes them on its own?

Dr. S. Husain Zaheer: Each laboratory takes up its own problems. Of

course, as I mentioned to you earlier, we have established a coordination—a liaison—unit, which establishes contacts with the technical Ministries of the Government of India. They are regularly in touch with their corresponding industry both in the public and private sectors and the administration. Then in our scientific advisory committee and executive councils of the laboratories, as well as in our Board of Scientific and Industrial Research, we have representatives of private sector industry, public sector industry and Government economic and technical Ministries. So, in this way we try to pick out the problems which are of interest to industries and then based on the results of our research the industry, both in the public and private sectors, have their utilization. Also, the industry asks us to do any particular type of research in which they are interested.

Mr. Chairman: Coming to the Patent Bill, we have for other patents 14 years, for food, chemicals we have 10 years. One argument advanced before us is that even the 10 years period is too small and unless we give 4 to 5 years for technical know-how to be translated into industrial production, afterwards it will only be two to three years left. If we reduce the period, no benefit will come to India; we will not be able to get any knowhow from the advanced countries. What is your view?

Dr. S. Husain Zaheer: As I have suggested earlier, Sir, the period could be reduced from 10 years to 7 years. I do feel that if there is any patent of the kind of 7 years period, it will ensure a reasonable return. I am not particularly enamoured of foreign firms investing in our pharmaceutical industry. And they will be pharmaceutical or food or chemical industries generally, except one or two cases where we have not adequate technique. If the patents are removed I can assure you that we will be in a position to develop the knowhow, manufacture, etc. with our own resources.

Only the profit will be less; it may not be 30 or 50 per cent. Our expenditure on development will not be 70 to 75 per cent, but prices will definitely come down at least for life-saving drugs. We will be able to meet the situation particularly if patents are also removed from the intermediates, because intermediates are important and we can manufacture intermediates also connected or required for the manufacture of these drugs or chemicals, on which you are proposing to apply this Act.

Mr. Chairman: Do you want 7 years from the date of specification, of the date of sealing?

Dr. S. Husain Zaheer: Date of application; the date of filing the complete application.

Mr. Chairman: There are three dates—date of application, date of specification and date of sealing.

Dr. S. Husain Zaheer: Date on which complete specifications are filed. That would be considered as the date of patent, 7 years from that time.

Shri R. P. Sinha: I wanted to know from the learned witness if he has given his thought to this problem. He is an eminent scientist of our country. I would like to ask him about purely scientific aspect and connected with pure research. You see we have now established very many research institutes all over India and you are coordinating in the CSIR. You have got a budget of Rs. 17 crores. I understand there are two types of research: one is basic research and the other is applied research. Now, we would like that the process of research should be quite substantial, although it is difficult to force the pace of research, as I understand it. But we would like some tangible results. But there is another aspect and that is we would like to know how much commercial use we can put to our research that is being done. Now, you have taken about 200 patents out of that. 200 are being

commercially used. Is it possible that at least in time to come a part of our research expenditure could be met from the income, from the research work on patent? You can say that I do not believe in that; research should be financed by the State. Now, in the debate that is going on we say that public sector factories must pave their way; they must be commercially profitable. I am not talking of the basic research; I am talking of applied research. The community is paying for that applied research work. The community is entitled to ask from this organization how much you are giving to the community by way of concrete results. Now, could you give us some idea how applied research could become self-sufficient, or at least a good portion of it is self-sufficient while that is being exploited by the country.

Dr. S. Husain Zaheer: I think it can do. I can give you one example of a laboratory where I worked for 16 years which is now earning nearly 30 per cent of its revenue expenditure through receipts but not from royalty and others also. That is also a small part. But it gets its receipts from fees for doing certain work and from selling some specialised products which it makes. I am strongly of the opinion that the applied research can to a very large extent be made self-supporting and should be made self-supporting.

Shri R. P. Sinha: Do you think we should limit our research more particularly to basic research to the public sector, that is Government laboratories financed by the State, or do you want extension of research in the private sector as well?

Dr. S. Husain Zaheer: I would not lay hard and fast rule. During the last 7 or 8 years, CSIR has been actively assisting in the development of scientific research by private industries by the formation of cooperative research associations. We have 8 such active associations in the country today where the expenses are shared. 50

per cent is shared by the members of the association, that is, by private industry, and 50 per cent is shared by CSIR. While I am in favour of encouraging this, as has been pointed out in our third reviewing committee report which we have drafted, our technological development or the interest or support to research has not been so much developed to an extent that we can rely on private enterprise, to support it to the extent that it is required for the economic and industrial development of the country.

An hon. Member: Is it project orientated?

Dr. S. Husain Zaheer: All programmes of CSIR laboratories as well as cooperative research laboratories are project orientated.

Shri R. P. Sinha: In other countries there are some research organisations which finance such research projects or research as a whole without any motive of compensating for all the expenditure on research. But I understand that some of the investment on research is on the basis that they will become commercially exploitable. The inventions will become commercially exploitable and therefore they will recover back the investment on research. Now, this we are told, is possible only under a patent system. Now if we do not have that—I am talking completely of India—how can the Indian research develop? Parliament is responsible for financing all those things. Take private industry. How can we expect that development to take place unless they are in a position to recover back expenditure on research by investing something which they can commercially exploit and recover back?

Dr. S. Husain Zaheer: I do not think that it is necessary to patent the process before you can commercially exploit it. It is possible to commercially exploit a process and earn profits, without the necessity of patenting it.

Shri R. P. Sinha: The learned witness feels that research should be

extended and it should be self-supporting. How to do it? I do not think the learned witness is competent enough to answer that question. One more question. When we abrogate patents here, should we not take advantage of patents somewhere else? I wonder if it is possible. There is this question of reciprocity. An American firm is willing to pay 7½ per cent for heymicin of Pimpri; the USA Government is not according sanction to it. USA Government is not prepared to grant that because they are looking to what we are going to do here. I wonder if the witness is aware that there is always a question of reciprocity. If we abolish patents here, we can't take advantage of what is there somewhere else.

Dr. S. Husain Zaheer: I am not aware that such reciprocity is obligatory. However I am prepared to forgo the advantage in the present stage of our development because the gains we are likely to get will fall out in place of the losses which we might suffer.

Dr. C. B. Singh: If the research work in each and everyone of your national laboratories is problem or project orientated, will it be helpful?

Dr. S. Husain Zaheer: I agree with you. They are now project orientated

in almost all our laboratories. Allocation of funds, time-limit, time-target of equipments required, all are project orientated. I would submit to you some of the reports of the laboratories.

Mr. Chairman: You said that the tribunal will avoid delays? What do you suggest as the composition of the tribunal? Suppose the committee recommends such a tribunal. What would you suggest to be its composition?

Dr. S. Husain Zaheer: I would like to leave it to the Ministry because the cases might vary from one to the other and therefore the type of scrutiny might also differ between one and the other. I would not like to have a permanent tribunal.

Mr. Chairman: You do not want a permanent tribunal. Would you like to have an *ad hoc* tribunal?

Dr. S. Husain Zaheer: Yes *ad hoc* tribunal for specific groups of cases.

Mr. Chairman: Thank you very much.

Dr. S. Husain Zaheer: Thank you.

(The witnesses then withdrew)

(The Committee then adjourned)

MINUTES OF EVIDENCE GIVEN BEFORE THE JOINT COMMITTEE ON THE PATENTS BILL,
1965.

Friday, the 26th August, 1966 at 14.40 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*.

MEMBERS

Lok Sabha

2. Shri Dinen Bhattacharya.
3. Shri Bibhuti Mishra.
4. Shri P. C. Borooah.
5. Sardar Daljit Singh.
6. Shri Basanta Kumar Das.
7. Shri V. B. Gandhi.
8. Shri Kashi Ram Gupta.
9. Shri Prabhu Dayal Himatsingka.
10. Shri Mathew Maniyangadan.
11. Shri Bibudhendra Mishra.
12. Shri Chhotubhai M. Patel.
13. Shri Naval Prabhakar.
14. Shri Sham Lal Saraf.
15. Dr. C. B. Singh.
16. Shri K. K. Warior.
17. Shri Balkrishna Wasnik.

Rajya Sabha

18. Shri Babubhai M. Chinai.
19. Shri D. P. Karmarkar.
20. Shri Shyamnandan Mishra.
21. Shri R. P. Sinha.

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, O.S.D.
2. Shri B. N. Atrishi, O.S.D.
3. Dr. A. Joga Rao, *Controller General of Patents, Designs and Trade Marks.*

REPRESENTATIVE OF THE MINISTRY OF HEALTH

Shri S. K. Borkar, *Drug Controller of India.*

REPRESENTATIVE OF MINISTRY OF LAW

Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—*Deputy Secretary.*

WITNESSES EXAMINED

I. Directorate General of Technical Development, Government of India, New Delhi.

Spokesmen:

- (1) Dr. B. Shah, *Industrial Adviser.*
- (2) Dr. P. R. Gupta, *Development Officer.*
- (3) Dr. S. S. Gothoskar, *Development Officer.*

II. Dr. M. L. Dhar, *Director, Central Drug Research Institute, Lucknow.*

I. Directorate-General of Technical Development, Government of India, New Delhi.

Spokesmen:

- (1) Dr. B. Shah, *Industrial Adviser.*
- (2) Dr. P. R. Gupta, *Development Officer.*
- (3) S. S. Gothoskar, *Development Officer.*

(The witnesses were called in and they took their seats).

Mr. Chairman: Gentlemen, these witness are Government witnesses. They cannot give any opinion on the Bill. They have been summoned here only for factual information. So, I would request you not to place them in an embarrassing position. You can ask only factual information from them.

Shri K. K. Warrior: Whichever question is not in order, you will please let us know.

Mr. Chairman: Gentlemen, whatever evidence you give here will be

public and it will be given to our Members and laid on the table of the House. Even if you want any particular answer to be confidential, that will be printed, published and given to the Members of Parliament. Now, you can give your opinion if you have any on the Bill. Afterwards, our Members will put to you some questions

Dr. B. Shah: I have no opinion to offer on the Bill. I have already submitted to the Committee the answers to questions sent to me.

Shri Sham Lal Saraf: I have seen a report compiled by Dr. Shah which is very much appreciated. Keeping in view the idea behind this Patents' Bill that is on the anvil at the moment, I would ask him two or three questions.

He is known to the Industry and is known everywhere. May I know, keeping in view the know-how in which we have a great paucity in the country to-day and which we mostly import, how the Technical

Directorate of the Ministry of Commerce and Industry, at the moment, is able to help the country in knowing more and more about the technical know-how in the pharmaceutical industry?

Dr. B. Shah: The technical know-how is very much different from laboratory processes and or specifications in patents and so on. The technical know-how is developed with the technical experience and competence of workers in the country. It very much depends on them, to translate these laboratory processes into commercial production. We have to gain more experience in this field. In fact we have been fortunate to have contacts with the many advanced countries of the world since a long time and we are progressing towards that direction. By gaining more experience in translation of processes to commercial exploitation, in the form of pilot plant operations, semi-commercial operations and also in the erection and construction of large-scale units this technical competence and experience will improve.

There is a considerable need for more experience in this field. With the development of the industry, this is slowly coming up and the people are also getting considerable experience by working with the firms abroad and with the technical collaboration with these firms and also during the process of construction of factories.

Shri Sham Lal Saraf: The Directorate of Scientific and Industrial Research has a net work of laboratories in the country. May I know if his Directorate is in a position to co-ordinate the different efforts and the different processes evolved in the Drug Research Laboratory in order to make the know-how or the process available to the entrepreneurs or any people who would like to go into the business? And when these inventive processes are passed on to the persons concerned whether in the factory or in the field, do you see whether the

pilot project has actually been put up in some of the laboratories in order that the finished end-product can be taken up for commercial production?

Dr. B. Shah: This is developing in our laboratories. In fact as I have already mentioned this is the main lacuna now in our research in the country. Industries also have research laboratories where similar work is being undertaken. For example, you might have heard of the Vit. C. project which was recently worked by the N.C.L. All the process details were worked out by that laboratory. But it has taken 2-3 years for H.A.L. to translate it into commercial production. Hindustan Anti-Biotics is now in a position to design and build a large plant. But this gap in our research effort has to be bridged. Now, the National Laboratories themselves are trying to put up their own pilot plants to make their processes more commercially feasible and acceptable to the industry.

As far as licensing is concerned, we see that whether there is a local know-how available of equal competence, it is given preference to any foreign know-how, for putting up units in the country.

Shri Sham Lal Saraf: Keeping in view the stage that we have reached and also keeping in view the fastness at which the modern scientific world is going, do you consider that the import of know-how is necessary and might continue for some time more to come? If that be so, may I know for what period these patents should be permitted? What should be the duration of patents?

Dr. B. Shah: If we have to go forward and catch up with the rest of the world, we certainly need to import technical know-how and construction and design facilities for large-scale plants and so forth. Moreover, even in the rest of the world these are progressing so fast that it is very difficult to cope up with them if we start work-

ing on them and trying to investigate what has already been discovered. We would rather use those energies to develop processes and know-how that have not already been developed in the other parts of the world. It is very difficult to say how long it will take. It all depends upon the efforts and also on our scientists and assistance we get from abroad for catching up with the rest of the world.

Shri Sham Lal Saraf: About the period of patent he has not said anything. He is in favour of importing the know-how. Naturally it will come under the Patent Law. What period would you recommend for the duration of the patent? To-day it is 16 years. In this Bill 10 years is suggested. From your vast experience what would you think should be the reasonable period for a process patent or a product patent?

Dr. B. Shah: That would really depend upon the willingness on the part of the collaborators to give us the know-how. When the protection is for a shorter period, I mean, if they are willing to be satisfied with a shorter period and are prepared to give us the latest know-how, then the period is not a very important factor. If they think that the period is too small for them to realise the costs they have incurred on the development of the know-how, then a longer period may be given.

Shri Sham Lal Saraf: We are framing a law. Under the law you cannot have different periods for different people. You will have to treat them all on par. What shall be the reasonable time limit for duration of a patent—10 years or 16 years?

Dr. B. Shah: As we develop our own know-how and there is a free flow and exchange of know-how between our country and other countries—that is what we call, two-way traffic—I think most of these things will become unimportant. It is only where we continue to pay money for

the know-how and do not get anything in return, and the know-how we can offer has yet to develop, the period and other things really assume great proportions. But it is mainly the willingness with which we can get the know-how from manufacturers abroad that will decide the actual period that we should fix for protecting the flow of know-how into this country.

Mr. Chairman: That depends upon what amount you are prepared to pay them.

Dr. B. Shah: In other words, it is so.

Dr. C. B. Singh: Dr. Shah with his experience as Industrial Adviser to the Government of India and with our desire for improvement of our industry in all spheres will you please answer one straight question? It has been suggested that complete abrogation of the Patent law will help in this direction? People have come forward and said 'You abrogate the patent law. You will see industry will advance by leaps and bounds.' What is your opinion on that?

Dr. B. Shah: As I just now mentioned, it is the technical base that we develop in the country and the way we use the scientific research made abroad for our industrial progress—that is the most important thing. As long as we do not have this technical base, competent and experienced men to translate into commercial production chemical processes and research work done elsewhere, we will continue to need certain amount of assistance, at least till we are able to reach the same level of competence as that of the other advanced countries.

Dr. C. B. Singh: In short, you do not agree with that view?

Dr. B. Shah: I don't think so.

Dr. C. B. Singh: Quite right. Now how can you remove this lack of experience for translating laboratory processes to what you call actual products? This is our weakness. The laboratory processes we know but to bring out, as a commercial

proposition, the products and put them in the market, lack of experience comes there. How can we remove this lacuna? You are an Industrial Adviser; you should be able to tell us.

Dr. B. Shah: We are now depending a good deal for this sort of translation on people who have gained a certain amount of experience of large-scale production, construction of factories and designing of plants and factories abroad. In fact there have not been many facilities in the country to acquire it. We would certainly need a large number of people of this type who actually will be the future builders of our industry and we would certainly need assistance for training in this field by people who have had this experience or by giving them facilities to gain this experience abroad.

Dr. C. B. Singh: Modern countries like Germany or Japan—I am told—are very highly advanced and you agree that by the end of the last World War, they were completely razed to the ground. Could you tell us how these countries have made such phenomenal advance in the industrial field?

Dr. B. Shah: This is very easy, because the people who really build the industries were there. Although the factories were destroyed, the men who had this technical competence to design and build plants were there. It is not merely the processes and factories that decide ultimately our competence in industrial development. The young men who are now working in the modern units and who are bringing modern technology into this country and who are playing a very vital part in building up of factories—they are the builders of our future. It is not merely dependent on the laboratory workers, the people who are doing experimental research work in the laboratories, but on those people who are doing work in the factories in India and abroad and have brought with them all the experience of modern technology with them. Even

if the factories are razed to the ground, they will be able to duplicate the equipment and build the factories again and with their experience regenerate the whole economy.

Dr. C. B. Singh: Do you think that foreign capital and foreign equipment and plant both in Germany and Japan played an important part in this direction?

Dr. B. Shah: Some resources in men and material might have helped; but the main builders are the competent technicians and scientists which they already possessed which we don't possess to the same extent.

Dr. C. B. Singh: You said that for quite some time we will need foreign know-how and foreign experience. What can we do to attract this foreign know-how to this country?

Dr. B. Shah: There are many ways of attracting this know-how. Government already has a policy in this matter. We have allowed considerable foreign participation. We have paid technical fees for bringing in processes, design and other work and also protected them so far against . . .

Dr. C. B. Singh: Supposing we make the patent law very weak, will that attract foreign know-how?

Dr. B. Shah: I think that is for you to judge.

Dr. C. B. Singh: No, no. You are an industrial adviser and this is a very important and simple question. We want a clear opinion from you on this point.

Dr. B. Shah: In this connection, I would refer you to the report of the ECAFE when certain studies were made for the ECAFE region countries South East Asian countries—and some of the difficulties were discussed by the ECAFE conference about their trying

to get know-how for their development. Some of them are even prepared to pay quite a handsome amount of money for technology and so on. But it was felt by the committee that since they did not have proper patent protection, they would not be able to attract really good know-how and one of the recommendations was that they must first protect the know-how before they can attract foreign know-how.

Shri Prabhu Dayal Himatsingka: You said that we will require technical know-how to catch up with the rest of the world. That is to say, you think that getting the know-how will be more convenient for us than to start finding from scratch?

Dr. B. Shah: Yes. If we try to cover the ground that has already been covered in other countries, we will always remain behind because they are progressing now in geometrical progression in the field of science. If we go on trying to cover what has already been covered in science, all our scientists will be employed in that kind of work, but if we get the technology that has already been developed from other countries, our present resources can be used for further progress and for maintaining our level of industrial growth as in other advanced countries.

Shri Prabhu Dayal Himatsingka: Supposing the patent of a product expires. Ordinarily, is it easy or difficult to manufacture that product without getting the know-how from the party?

Dr. B. Shah: There are two ways; either you have to work out your own know-how or you have to get it from the party. As I said already, for working out the know-how, you need a considerable amount of technical competence and experience and till that is developed, it will be much easier to get it from the parties straightway rather than waste several years trying to work out what the party has already got.

Shri Prabhu Dayal Himatsingka: Therefore, the expiry of the period of a patent, in itself, will not be of much use unless we have got competent persons who can do the follow-up work?

Dr. B. Shah: Yes, Sir.

Shri K. K. Warrior: May I know whether Technical Development has got an advisory body?

Dr. B. Shah: We have got a development council.

Shri K. K. Warrior: Who are the members of the development council?

Dr. B. Shah: There are about 30 members and the Chairman is Mr. A. V. Modi. In that council, there are representatives of owners of industrial undertakings, technical men in the undertakings, representatives of consumers, representatives of trade (chemists and druggists) and labour representatives.

Shri K. K. Warrior: What is the any discussion on this Patent Bill in your council?

Dr. B. Shah: Yes, Sir.

Shri K. K. Warrior: What is the general consensus?

Dr. B. Shah: The council has always recommended that the patent is very necessary for the development of industry.

Shri K. K. Warrior: You want a stricter or a weaker law?

Dr. B. Shah: They have not gone into the details, but generally they have supported it.

Shri K. K. Warrior: What was the consensus about the existing Act and the present Bill? Was any difference felt or . . .

Dr. B. Shah: Unfortunately during this period i.e. after the Bill had

come in, it has taken a lot of time for the council to be reconstituted. Only recently it was reconstituted and they didn't have much time to discuss these aspects.

Shri K. K. Warrior: Generally, are they for or against this patent law?

Dr. B. Shah: Generally, they are for this patent law.

Shri K. K. Warrior: Any representatives of the Government undertakings in this council?

Dr. B. Shah: Yes.

Shri K. K. Warrior: What is their opinion?

Dr. B. Shah: I think you interviewed some of the representatives of the Government undertakings recently.

Shri K. K. Warrior: What is their opinion according to your knowledge in your association with the council?

Dr. B. Shah: Well, Sir, some of the industrial undertakings have done very well and they have taken out patents for some of their drugs discovered in their research laboratories. I feel they would naturally be for patents. They have taken world patents for some of their drugs which earn very good foreign exchange for the country.

Dr. C. B. Singh: What is the total number of such patents?

Dr. B. Shah: There are about two or three drugs for which they have taken out world patents. The recent one Antiamabin, is going to be most fruitful because the terms offered are very good.

Shri K. K. Warrior: I understand from some source that our Government pharmaceutical industry is not fully represented and their views are not taken into consideration in the development council. Is that a fair criticism?

Dr. B. Shah: No, Sir, the Managing Directors of both public sector pharmaceutical industries are there.

Shri K. K. Warrior: But the views of those who are not falling in line with the general thinking in the council are not taken into consideration?

Dr. B. Shah: That is not correct. We always send the minutes for circulation and the dissenting views will also be recorded.

Shri K. K. Warrior: You said that the general feeling in the ECAFE was that unless protection is given for the know-how, know-how will not come into this country.

Dr. B. Shah: Yes.

Shri K. K. Warrior: Now, how can a patent law give any protection to know-how?

Dr. B. Shah: Probably the feeling was that once a know-how is known anybody can use the patent and the know-how can pass on from one party to another, who has not paid for the patent.

Shri K. K. Warrior: Is not the know-how quite different from what is patented?

Dr. B. Shah: Yes, Sir. They are two entirely different things.

Shri K. K. Warrior: How is it that a patent law can protect the know-how? Know-how whenever it comes is known and it can be given. Only the process or the product can be protected.

Dr. B. Shah: But the other man can't undertake production without infringing the patent although he may have the know-how.

Shri K. K. Warrior: Now we are providing patent right only for the process. Suppose there is a new process through some new know-how. Is that to be excluded?

Dr. B. Shah: If we are only going to have process patent. Certainly other processes can be worked. There is no restriction at all.

Shri K. K. Warrior: Then where is the question of protection to know-how. Protection to know-how with regard to a particular process, that is all the protection. According to the Development Council and your knowledge, how much of our development has been blocked by this existing patent law. Has it blocked also the development of technical know-how in our country?

Dr. B. Shah: Sir, as I have already mentioned, development of the industry has been mainly handicapped for want of this technical competence to translate processes and even our own laboratory processes to commercial production. This is playing the main part in our not having been able to catch up with the rest of the world. Other aspects are very minor.

Shri K. K. Warrior: Now we are told that at least in the drug and pharmaceutical industry, we have almost 99.9 per cent know-how and we can manage without any form of foreign collaboration.

Dr. B. Shah: It depends on the product. Where the processes are fairly simple that we can develop with our existing competence, we have put up plants without foreign collaboration, but where the processes are more complicated, where several steps in the reaction are involved and where even a small fall in yield in each stage would mean a considerable increase in cost, we have had to take know-how from abroad.

Shri K. K. Warrior: When a process or a product is available by paying a lump sum which can be realised from the consuming public, is that not creating a sense of complacency even amongst our own industrialists and investors not to go in for all these expenses on research and for our own inventions and development of know-how. Now sugar is available from foreign markets at a cheaper rate. If we take it, there is no necessity for developing our own sugar industry and loading the consumers with all the prices. The Bill is essentially

intended for our own research development and development of our own technical know-how and our own industry.

Dr. B. Shah: There is some protection of the industry. If we produce something, we naturally prevent it from being imported and a competition being set up within the country. Somebody may be prepared to dump sugar in our country and kill our industry. That is the sort of protection which pharmaceutical and chemical industries are getting today. When anybody develops his own process and puts up a factory, we see that it is not being priced out by somebody bringing in imports and ruining the industry. That is what has been the object of the present import regulations and the Industries Development and Regulation Act.

Shri K. K. Warrior: We have provided in the Bill that Government can in spite of all the patent rights import whenever there is an emergency or whenever there is a critical situation in the country like epidemic, drugs for the consumption of the country. Do you think that this patent right must be given to those industries which are only importing either in the form of the last stage or an intermediate stage just to cover the provisions of the law and then having it packed here and given to the consumer. Can we not block it? Why should we give that protection?

Dr. B. Shah: Whenever we set up a production unit here, we see that it is not just from the penultimate stage, but there is a regular development from basic raw materials which should ultimately become available in the country. That is the object of the Industries Development and Regulation Act. Most of the industries set up have been based on basic raw materials that we are either producing in the country and are ultimately going to produce.

Shri K. K. Warrior: Is that the case in the pharmaceutical industry?

Dr. B. Shah: Yes, Sir, we have achieved basic production in most of the products.

Shri K. K. Warior: I am a layman, I do not know, but those people who are in the know of things, especially those engaged in the pharmaceutical industry in the private and public sectors have complained that only the penultimate stages are coming here and we are paying through our nose for the intermediate stages and only packing and labelling is done as a matter of fact, and the reason is that the patent law is giving the protection. What is your experience?

Dr. B. Shah: Pharmaceutical industry initially developed by merely processing imported bulk drugs. That was the first activity. But progressively during the last 8 to 10 years, Government have followed a regular policy of encouraging basic manufacture within the country. As you might see, substantial portions of the drugs are being made in the country from basic chemicals and intermediates and we are also setting up units to produce these very intermediates, because these intermediates cannot be made by the pharmaceutical industry; they come within the purview of the chemical industry. So we are setting up units to produce these intermediates in separate units. Actually we are bulking up the demands of other allied industries like dyes, plastics, rubber chemicals, and so on, so that we could have economic units for manufacturing these intermediates to feed these industries. As you might see, for nearly Rs. 18 crores worth of bulk drugs that we are producing, which are being processed into finished pharmaceuticals, we are importing only about 2½ crores worth of intermediates. It has been planned that HOC will produce nearly 1½ crores worth of intermediates required by the drug industry. The synthetic project in Hyderabad will produce a crore worth of intermediates. The fertiliser plants will also produce certain solvents and this alongwith the production from petro-chemical

complexes, the balance requirements will be met. Then there are private chemical industries which are coming up with production of several required items. We have planned in India production of basic pharmaceuticals from intermediates and basic chemicals in the pharmaceutical industry. We have planned production of these chemical intermediates in the chemical industry. These two activities have been dovetailed. It is only when it is uneconomic to make goods (our demand being low) that we may continue to import. Where we feel that we should certainly not burden the industry with very expensive intermediates made in small quantities, we may continue to import them and pay for them by means of export of items which we can make more economically and in which we can compete in the world markets. For example we have developed our export of plant products to nearly 1½ crores. That is last year's exports. We have put up units which make the intermediates for hormones from plants which are growing widely in the Himalayas. We have put up recently for Menthol a unit which is going to export nearly 25 lakhs worth of Menthol from this country. Where we think we are in a more suitable position to produce and compete in the world market, we are concentrating on those lines rather than on items where we find we will always be out-beaten in price by other countries which have various other facilities. We have got varying climatic and soil conditions. We can very well produce a number of plant products. India is known as the botanical garden of the world. Our approach in planning has been to produce only the intermediates which we can make economically at competitive prices and produce more of them so that we can export them to the world markets.

Shri D. P. Karmarkar: In respect of industrial development in general, and the drug industry in particular, is it more often that we have gone

to them to make offers if they have come to us and made offers? Which is the trend?

Dr. B. Shah: This is where the Industries Development (Regulation) Act comes into play. In some cases people have come up for making some profitable items from their side. We have had people who come up with projects that are more economical for us and which will help in the development of our industry. We have screened these offers when they come to us. In some cases we have persuaded them to come up with schemes where we felt that they will be helpful to us. Indian Investment Centre is doing a good deal in this respect and we give them from time to time items for which we need collaboration and the lines of development that we need. So this has been more or less a very regulated development.

Shri D. P. Karmarkar: I appreciate that. Coming to the drug industry, can we say it is fifty-fifty?

Dr. B. Shah: Yes, it is both ways.

Shri D. P. Karmarkar: Has it been our policy in the past, other things being equal, to invite foreign collaboration and develop our industry, particularly drug industry, as early as possible? Has it been our own anxiety?

Dr. B. Shah: Wherever there is equivalent skill available in the country our own scientists have been given preference. Where we wanted the know-how, the technology or processes and so on, we have had to invite people from outside.

Shri D. P. Karmarkar: I put it like this: Had it been our anxiety during the last ten years, particularly during the last five years, to speed up as much as possible our industrial development and the drug development?

Dr. B. Shah: That is certainly true-

Shri D. P. Karmarkar: Have we been seeing to it that as much of our advantage should be protected as possible with foreign collaboration?

Dr. B. Shah: Yes.

Shri D. P. Karmarkar: In cases where we thought it was not so, have we rejected that?

Dr. B. Shah: Yes.

Shri D. P. Karmarkar: So far as our own law is concerned, have you any suggestions to safeguard our interests as much as possible in respect of the return that we may give to the foreign collaborators?

Dr. B. Shah: After all, most of these are foreign agreements. There have been various committees of Government known as the Foreign Agreements Committee, Capital Goods Committee, which have been mainly concerned with the objective to see that the payment is not excessive, compared to the return that we get and all these aspects. We have the Industries Development (Regulation) Act and various regulations. It is ensured that they get a reasonable return.

Shri Babubhai M. Chinai: Will you kindly refer to your answer to question 5(b)? Will you explain more clearly what you mean by "technical base"? How far the country has acquired modern technology to build the industry on its own?

Dr. B. Shah: Sir, by "technical base" what is implied is the technical competence and experience of the workers to be able to work out the necessary details on their own to make a process commercially successful. In other words, it is the experience for translating the process specifications or even laboratory processes developed by research laboratories into commercial production. In comparison with advanced countries we are lagging behind in this respect.

We should be able to produce all items where comparatively simpler techniques are involved without much foreign assistance, but where more complicated techniques involving a large number of steps are involved it has been necessary to obtain collaboration for establishing commercial production.

Shri R. P. Sinha: I would refer the witness to the statement which he has given along with his replies on the question of First Five Year Plan targets. He has also given the Fourth Five Year Plan targets. He has also explained the shortfalls that have taken place in some of the items. And mostly I find that this is due to the fact that the public sector units have not gone into production. So they have to lag behind. Then am I to conclude from this that so far as the targets set for the private sector in the pharmaceutical industry are concerned, they have been achieved?

Dr. B. Shah: Sir, it appears from the statement that the public sector has lagged behind very much but this is because most of its units are nearing completion and there has been some marginal delay in getting into production within the plan period due to various factors. And it has happened that most of the private units have come up but here are also cases where there have been delays and they are also completing their construction work by the end of this year.

Shri R. P. Sinha: I want to refer to anti-leprotic drugs for which you have given "Production was low as under assistance programme considerable amount of this drug was being imported."

Dr. B. Shah: It means that certain quantity of this drug was given probably very cheap or almost free by UNICEF. This is a peculiar phenomenon for the market of this drug. In this case it is not a leper who goes to purchase the medicine in the

market but some Leper Associations or some Philanthropic bodies which buy and UNICEF supplied large quantities to the Government and hence the capacities were not fully utilised as these were being probably distributed free.

Shri R. P. Sinha: Isn't it proper that we must develop the production from these units so that we may become self-dependent? How has it lagged behind?

Dr. B. Shah: As I have already said the capacity is there and they can always produce whenever required. They produced it to a particular stage so that whenever time comes they can convert it within a short period to the finished product.

Shri R. P. Sinha: In reply to question No. 1(f) you have said "The value of production of bulk drugs is estimated at Rs. 18 crores annum. This along with an import of bulk drugs of Rs. 7 crores is processed to finished pharmaceutical preparations with a sale value of Rs. 150 crores." Now I would like to point out Rs. 18+Rs. 7 crores come to Rs. 25 crores. Now Rs. 25 crores worth of bulk drugs is valued at Rs. 150 crores drugs so far as sales is concerned. This appears to be a very high proportion. Now, is this a correct thing? Have you made proper technical assessment that the same values are correct or do you think there is good deal of profiteering in this sale.

Dr. B. Shah: There is considerable amount of work that is undertaken between a bulk drug and its conversion to a finished drug. It costs considerable amount of money in the form of other ingredients, maintenance of aseptic conditions and various manufacturing operations to convert bulk drugs into dosage forms. In this case the margin might be about 5 to 6 times. It is quite low as compared to other countries. If it is an injectible preparation the mark-up is very high—it is about 1 to 10. If it is tablet it is hardly 1

to 2. 1 to 5 is an average. It includes packaging, the cost of glass bottles or vials with aluminium seal, etc. in which the finished product is marketed.

Shri R. P. Sinha: Do you mean to say this also includes the cost of advertisement and cost of educating the doctors.

Dr. B. Shah: Yes, Sir. Certain kinds of promotional expenditure are also included in the cost.

Shri R. P. Sinha: Have you studied whether this mark-up is reasonable and the people who are manufacturing are not profiteering?—What is your system of checking up these things? How do you check up that marking up is correct?

Dr. B. Shah: Before a licence is given to a firm these prices are also looked into now. Actually they are asked to give full details. Various break-ups are given by them and they are being scrutinised by the Government.

Shri R. P. Sinha: Do you mean to say the manufacturers cannot put up their prices and they have to get the sanction before they can sell at a particular price?

Dr. B. Shah: It is so now.

Shri R. P. Sinha: It has been represented to us by many witnesses and also the Drug Controller has circulated to us a statement of prices in which it is alleged that the prices of these products in India are very high and we are also told that the manufacturers are profiteering. Mind you, they are not making profits but they are profiteering. What you say is contrary to the above. You say you keep a control and, as such, do not allow the prices to be charged over and above what you give them authority to charge. How shall we reconcile the two points of view? Secondly we are told that even in a country like Pakistan the drugs are

very much cheaper than the drugs sold here. Could you give us some information as to whether the prices are reasonable? Secondly, why the prices in this country are higher than Pakistan? Have you checked up the customs duty and excise duty in Pakistan? Let us know the correct position and comparison of prices in these countries.

Dr. B. Shah: I have not received this statement. I will check up and let you know. You can always make a statement by selecting a few things where others prices are lower and ours are higher. It is a very fallacious thing. You have to see the general trend of cost of drugs of the entire range of products and by mere selecting a few and getting a statement prepared you can prove anything you want.

Shri R. P. Sinha: Mr. Chairman, I would like to repeat to you one thing that all the cost statements that have been given to us, so far as prices are concerned, are from two sources—One from the witnesses, foreign and Indian, they have given to us the prices obtaining in India and outside. Two sets of such figures have come to us. One set of figures tell us that prices are cheaper in India. The other set tells us that these prices are very high in India. The other point is his telling us that the prices are very costly. The Drug Controller has given to us some statements showing that prices in India are very much higher than prices in Pakistan. As technical expert of the Government Mr. Shah may please give us a proper assessment so far as this aspect is concerned. I request you that all those figures given to us may be sent to Mr. Shah. He has promised to give us his own assessment. This may be sent for his proper notation on each of these things. He may give us his considered opinion on this aspect of the question. In reply to Q.4(a) you have said that in case of finished drugs, the committee has observed that the cost of basic drug is high in India; but the cost of

finished preparation is much less than in foreign countries. What is this about?

Dr. B. Shah: This is the finding of one of the committees of the development council, the technical sub-committee of the development council. They have given these figures. They have compared with other countries, Italy, UK, USA and so on. This is the conclusion which they have drawn which I have quoted here.

Shri R. P. Sinha: Were you a member?

Dr. B. Shah: Yes.

Shri R. P. Sinha: Do you stand by this report?

Dr. B. Shah: This appears to be....

Shri R. P. Sinha: We would like to have the details. You have given the conclusion only. What are the details from where you have drawn all these conclusions?

Dr. B. Shah: These are given in the Report. I have got a copy of the Report.

Shri R. P. Sinha: Sir, we would like to have all these things sent to us in cyclostyled form or in whatever manner you like. Members may like to study on those facts. For that we should have the factual data.

Dr. B. Shah: I have already given.

Shri R. P. Sinha: What is the page number?

Dr. B. Shah: Page No. 21.

Mr. Chairman: This is different.

Shri R. P. Sinha: Let it be circulated to us. On behalf of Shri K. K. Warrior, I want to ask one question. What is the meaning of the word 'International price'? Is there anything like 'International price'?

Dr. B. Shah: I do not know what is the context in which it is used. We buy certain drugs in the world on tender basis. We get various quotations. This varies from period to period. We buy streptomycin on world tender basis and our prices have varied considerably, sometimes it has gone as low as 105 and it has gone up to as high as 200. It is all a matter of supply and demand in the world market and the price it fetches. It is something that is varying depending upon the supply and demand position.

Shri R. P. Sinha: About the research programmes for basic drugs in our country, are you satisfied that research programmes for basic development of drugs in this country is satisfactory? If not do you think what we should encourage such research in the private sector industry-wise?

Dr. B. Shah: It is very essential for the industry to establish more independent research laboratories to undertake all the three spheres of research—producing new drugs, improvements to existing processes, as well as formulation research. There is considerable work being done on development research with regard to formulations and process improvements. But very little is being done on the development of new drugs. On this sphere, we need a large number of laboratories to come up.

Shri R. P. Sinha: The ECAFE Committee went into it. What is the committee's report?

Dr. B. Shah: These are certain countries which are very much underdeveloped than us. There, the very question of basic manufacture of drugs, and even formulating units being set up and things of that sort were taken up. They don't have the personnel to do such advance research yet. Their technology is still far, far, behind. This aspect does not come up to the front in this report. This committee has recommended that research should be encouraged with regard to

plant products that are grown in these countries.

Shri R. P. Sinha: One last question. You say basic research is important. We were told that it requires lot of money to make investment in research. Could you tell if it is possible to attract foreign know-how and foreign capital for research work because I understand that many of these foreign big research units and pharmaceutical companies are negotiating with the Government of India for setting up such laboratories in India? Do you think that they will be attracted to come to set up the research laboratories in India for basic research, if we encourage or plan for that?

Dr. B. Shah: There have been several proposals made by foreign firms to set up independent research laboratories but they are all awaiting the outcome of your report before they finalise their programme.

Shri R. P. Sinha: What do you mean by that?

Dr. B. Shah: They want to see how patent law is going to be amended by you.

Shri B. K. Das: You have given your opinion that progress of pharmaceutical industry in our country depends more on collaboration with other countries. But we have certain Indian companies, advanced companies also which have no collaboration. Is it your opinion that there would be greater progress if they take up foreign collaborations?

Dr. B. Shah: Even some of the Indian companies have been utilising foreign know-how and have availed of this know-how to catch up with the rest of the industries. A firm like Alembic for instance. They have put up a penicillin plant. The cost was high. They did get collaboration from a Japanese firm for improving their methods. They would have been able to solve it themselves, but it would have taken a long time and

meanwhile they would have to face uneconomic production. So even these firms which are Indian firms have availed of this know-how by getting into foreign collaboration by getting some assistance on lump-sum payment basis and improved their technology.

Shri B. K. Das: Do you think that there are any provisions in our present Bill which in the opinion of collaboration companies will work as a great disincentive?

Dr. B. Shah: This is a matter of opinion, which I would not like to enter.

Shri B. K. Das: We have provided for process patent and not for product patent. Which one will be more helpful for the successful development of our pharmaceutical industry?

Dr. B. Shah: I would like to be excused from expressing my views on this subject.

Shri V. B. Gandhi: We find that your evidence has been very interesting and it will be of benefit to us. The principal object of this legislation is that the pharmaceutical industry in this country should grow and that we should be in a position to rely less and less on imports. This effort has been viewed in different angles. One set of people thinks that the terms and conditions should be so laid down or so tightened that the payment which we have to make by way of royalties and such other benefits to foreigners should be as less as possible. The other set of people says that we should not tighten our terms and conditions so much that in the process our own people who are to benefit from the provisions of this legislation will suffer. You have of course gone through the Bill. What do you think about the term of a patent? You know what we have proposed? What is your opinion about the rate of royalty? Should the rate fixed be so rigid or there should be a ceiling over it or it should be left to the discretion of the authorities? What I am

really wanting to say is that in the last analysis our efforts should not result in defeating the very purpose, the purpose of promoting indigenous pharmaceutical industry.

Dr. B. Shah: This is a very difficult question, but I would try to answer it in my own way. After all, what we are now trying is to get into the country the technical know-how from abroad. There are different types of know-how, some adopting the latest technology and some obsolete technology. We have to decide what is best for our country and in that respect we should not get lost in the rates of royalties, terms and conditions and things of that sort, because we may not be doing any good to our pharmaceutical industry in getting some obsolete know-how at a low price. We have to weight the various circumstances and after all the know-how is given voluntarily by the party; you cannot force him. You could only use his process, but the know-how is something that comes voluntarily. We have to consider the rate of royalties that exists for different technologies in other advanced countries. This is the aspect you have to consider.

Shri P. C. Borooah: In answer to Question 6(b) you have stated that facilities available in India for Group Research are limited. May I know what, according to you, will be the ideal condition for promoting Group Research in our country?

Dr. B. Shah: Group Research is something new to this country. Few of our industries have put up laboratories for carrying out Group Research. We need organised effort and a number of scientists in different disciplines of science; it needs a huge laboratory, a lot of equipment and a lot of money: There must be somebody who is prepared to spend all the money, even with the chance of not getting any return, because after all the discovery of a drug is a chance; you may spend lakhs of rupees and you may not get anything; on the

other hand you may not spend very much and yet get something. It is more a lottery. It is only the pharmaceutical industry that can do this. They can always plan their expenditure in such a way that what they lose in a particular place they gain somewhere else. You cannot expect the Government laboratories to try Group Research in a big way by spending a lot of money with a chance of not getting any result and then answer questions later on. It is not possible for the Government to spend so much money on Group Research.

Shri P. C. Borooah: You say that a number of foreign firms are interested in setting up research facilities, but they are waiting for the decision of the Government on patents. For what decision of the Government they are waiting?

Dr. B. Shah: They probably want to see how the results of their research are going to be protected by this country.

Shri Kashi Ram Gupta: In developed countries, the pharmaceutical industry is on a different footing. The big concerns have got their own basic research arrangements and facilities. In India, we totally lack in that. Either the public sector in our country should do much of the basic research or we should invite foreign firms to put up their own laboratories. You have just now mentioned that these foreign firms are waiting for the enactment of our Patent Law, which means they want to see whether it will be beneficial for them or not. Should we not lay stress on our public sector enterprises for basic research because in the long run that can only pay us?

Dr. B. Shah: It is working both ways. Public sector enterprises are entering the field of research and the private institutions have also produced good results.

Shri Kashi Ram Gupta: I am talking about pharmaceutical industry only.

Dr. B. Shah: In the public sector, the Hindustan Antibiotics have developed several new antibiotics. CIBA Research has developed 5 or 6 synthetic drugs, which are promising. I don't think we should cut off one for the sake of the other. There should be competition from all sectors. Research is a vital thing for pharmaceutical industry and development of research should be given a free scope so that new knowledge may contribute to the supreme effort of ameliorating the suffering of humanity.

Shri Kashi Ram Gupta: The foreign concerns want to come only when it suits them. Seeing to the limited resources in the country the private sector in the country is not able to undertake big research programmes. Such being the condition, the collaboration arrangement also may not work well. In that event also, we have to depend on our own public undertakings. What I mean by this is that we should base our patents in futures more on research done by public undertakings side rather than on the private sector side. That is my point.

Mr. Chairman: He says that it should be based on both sides.

Dr. B. Shah: I do not agree that the pharmaceutical industry as such cannot undertake research. There are big concerns which are certainly undertaking research in this country. There are small concerns which may not be able to undertake research. But, bigger concerns (private industry, can certainly afford to undertake research and they should be encouraged to undertake research. Public sectors also should undertake research. All of them should contribute to the research. There is no special stress to be laid on a particular sector.

Shri Kashi Ram Gupta: So far as the period is concerned, it has much to do with the type of research being done by the concern. Therefore, I am stressing on this point. If we do not get that type of quality research

from the private sector, at least, we cannot wait for a very long period. From that point of view, whether the hon. witness is of the view that the public sector undertakings must play a more important role than what they have been playing uptill now?

Dr. B. Shah: There are research institutes run by Government.

Shri Kashi Ram Gupta: No doubt the institutes are run by Government. And more institutes may also be there.

Dr. B. Shah: I think that there is scope for more research institutes being run both in the private sector as well as in public sector. For such a vast country like ours, the research done at present is very limited.

Shri Kashi Ram Gupta: Are our scientists getting their due share in the research in the present set up?

Dr. B. Shah: This is a question on which I have no information.

Shri Kashi Ram Gupta: You have stated that in your Council, formerly, they considered so many points about the industries. May I know whether the point about the period of a patent was also taken into consideration at that meeting?

Dr. B. Shah: All these details were not discussed by the Council at their meeting. It has been reconstituted very recently.

Shri Kashi Ram Gupta: From the period point of view, was this at all discussed?

Dr. B. Shah: They have not considered that.

Shri Kashi Ram Gupta: You have mentioned that units should be fairly large for production purposes. Of course the producers should be seeing to the demand about the consumption of the products. Has it been

analysed as to what should be the basic minimum standards by which a unit can be measured to be economical or uneconomical so far as pharmaceutical industry is concerned?

Dr. B. Shah: There is no yardstick for this. Actually, from my personal experience, I can say when I visited factories in 1956 in Europe I found that a particular product was being produced with a capacity of 50 tonnes. We set up a certain unit with a capacity of 10 to 15 tons with the hope that it could be expounded later on to 30 to 40 tonnes. In 1964, all these units were producing 300 tonnes annum. It is all a question of demand and production. We produce more when the demand is more. But, if there is no demand, there is no use putting up a higher capacity. We have to weigh various factors before establishing the capacity. We have to see whether it is very uneconomical and the production is not too small. We always examine this aspect.

Shri Kashi Ram Gupta: In answer to question No. 6(b) about the facilities that are available in India, you have mentioned the names of the Central Drug Research Institute, CIBA etc., etc. Whether any assessment has been made about the future set up of the institutes in the next Five Year Plan?

Dr. B. Shah: In the Plan to be drawn up for pharmaceutical industry, we have not included the number of research units to be set up. Probably in the Research Department of the Council of Scientific and Industrial Research and so on, they might have planned this.

Shri Kashi Ram Gupta: On page 13 of your replies to the questions, it has been stated that 'cooperative research organised by pooling the resources of a number of firms set up under the auspices of the association is not common in the pharmaceutical industry'. What are the reasons for this?

Dr. B. Shah: Because it is mainly competitive research. One firm produces a product more economically than the other. It will produce a new drug and profit by it before the other has an access to it. There is a certain amount of competition. There are few general problems which these cooperative research organisations can really tackle. It is a question of trial and error. Somebody might have screened 4,000 compounds and spent a lot of money which may not be useful. There are some who might have screened about 400 compounds of which some might be useful. There is a sort of competition between one and the other unit in the industry to have something new. It is very difficult to have a cooperative research. That is the sum and substance of this.

Shri Kashi Ram Gupta: We are judging all these industries on the basis of their being of commercial value. Now, in the future set up of the country, the Government which is wedded to socialism or socialistic pattern of society, might take their help for production of medicines both on the protection as well as on the treatment side. If a large proportion of the population is to be covered by the health insurance schemes, in that case, the commercial aspect of the pharmaceutical industries will have a definite change. Has this been considered by the Government for the future set up at least for the next ten or fifteen years?

Dr. B. Shah: If you are referring to the National Health Schemes of UK, I don't think that it has anyway changed the pattern of prescribing the medicine and treatment. It has not changed the whole set up of the pharmaceutical industry in that country at all. There are a number of private firms as well as government establishments producing drugs and competing with each other.

Mr. Chairman: It has been brought to the notice of this Committee that

certain foreign firms have tried to profit by the exploitation of Indian products such as the Chloromysitin, Tolbutomide and some other drugs. Like that, what is the remedy you would suggest in this Bill to prevent such abuses?

Dr. B. Shah: As far as my knowledge goes, most of the difficulties have arisen when the parties try to import the know-how from the third party and not develop on their own. We have similar problems in India not only for pharmaceutical industry but also in the chemical industries. When somebody develops the know-how, what he actually does is that he makes efforts to get a compulsory licence and goes ahead with the production and waits for results. He is not prevented from doing that. When he has to get a know-how from the third party, probably, it amounts to infringing the rights. Then the difficulty comes in. The other difficulty comes in only where they have developed processes in certain research laboratories and they have not been able to translate them into commercial production due to various lacunae which, I have mentioned, and the people have not been able to get the desired results. These factors have been more or less responsible rather than the efforts of these firms in preventing anybody to utilise any research of know-how locally developed.

Mr. Chairman: Is it your opinion that the claim put forward by the Indian scientists is not quite correct?

Dr. B. Shah: No, Sir. I don't say that their processes are wrong. But, they have not been developed to that stage of commercial exploitation which is very essential for any industry to take up. Our country has to overcome this difficulty. Then only our research becomes more useful. It is not very much the patent but it is this aspect that comes in the way.

Mr. Chairman: India is a very large country, has a very large population and the people are poor. It has been brought to the notice of this Committee that foreign firms are only importing the final stage of the product and then perfect it and sell it at a very high price, thereby exploiting the country. What are the measures you are taking to prevent such abuses and to enable the foreign firms to start the manufacture here of the basic products and sell them at reasonable prices and in sufficient quantities to meet the demands of the country?

Dr. B. Shah: We have established production of various drugs from basic stages. I can give you the saving in foreign exchange which will give an indication as to how final products are being made from mainly indigenous raw materials. We have instances where this saving in foreign exchange for bulk drugs manufacture is as much as 90 per cent—where only 10 per cent of the value as raw materials is being imported. Some save 50 per cent; still others in the later stages 20—30 per cent. Government is always seeing that whenever production is established within the country there is a saving in foreign exchange by way of basic production. In other words, the product really becomes available to the consumer in the country at a much lower price in terms of foreign exchange than it would have been available if the product is imported in the final stage. It may be that the prices are higher, but what we pay in the form of foreign exchange is much less. For example, tetracycline we pay only 10 per cent of the imported price in the form of imported raw materials. So we see when the schemes are taken up for production that they are based on as many indigenous raw materials as possible and schemes which had been taken up from the penultimate

stages—most of them—have disappeared by adopting a phased programme which ensures production from more and more basic raw materials. We have also, as I mentioned earlier, taken up the production of these very intermediates to improve further the saving in foreign exchange. Of course, some of the intermediates cannot be legitimately taken up for production in the pharmaceutical industry. Some of these have to be pooled with the requirements of same or similar items required by other industries. If you see this brochure, (IPI booked) on pages 36-37 we have given the various raw materials of the pharmaceutical industry which are at present either being produced by our units or are still being imported. If you see page 36, you will find a much larger capacity has been licensed than what is required by the pharmaceutical industry. Take Acetic Anhydride. We need only 1400 tonnes for the pharmaceutical industry. Its capacity is more than 5,000 tonnes. That makes it more economic in production. So, this way, we are trying to cover up most of the requirements of the intermediates by pooling with the requirements of other industries, but it still leaves certain intermediates which are required in small quantities which it will be very uneconomical for us to produce and will have to continue to be imported. If you see these various intermediates given on pages 36—45, it covers an import of intermediates of the value of about Rs. 7 crores which we need to achieve our Fourth Plan target. Schemes have been undertaken to produce as many of them as possible within the country which will bring down our import bill for the industry to something like Rs. 4-5 crores ultimately which the industry can always earn by developing its exports.

Shri Kashi Ram Gupta: There are a lot of patented medicines whose patents have lapsed, but in spite of

this the industry is not able to produce such medicines in this country. Did you consider this point and what are the reasons behind it?

Mr. Chairman: No know-how.

Dr. B. Shah: As I told you earlier if it is a complicated process. We need the know-how. When it is a simple preparation we can develop our own. It is again a question of developing our own technical base so that we may be able to produce all the items within the country either with our own know-how or with imported know-how.

Shri Kashi Ram Gupta: Whether efforts have been made in this direction to produce our own know-how so far as such medicines are concerned whose patents have lapsed?

Dr. B. Shah: Yes, Sir. There have been several efforts. This is the aim of all our various Plans, Third Plan, Fourth Plan, etc. Based on our demands we fix our targets and license the capacities. We request the research laboratories also to develop the know-how for their manufacture and we encourage entrepreneurs to take up these processes and start producing them within the country.

Shri Kashi Ram Gupta: Have you been successful?

Dr. B. Shah: Yes, we have achieved more or less our Third Plan targets to a great extent. We hope the same co-operation will come forward to achieve our Fourth Plan targets.

Dr. C. B. Singh: Dr. Shah just now read some statistics from some paper. We would like to have a copy of that.

Dr. B. Shah: I will send it to you.

Mr. Chairman: Thank you, Mr. Shah, and your colleagues.

(The Witness then withdrew)

**II. Dr. M. L. Dhar, Central Drug
Research Institute, Lucknow**

(The witness was called in and he took his seat).

Mr. Chairman: Those of us who had gone to Lucknow had the benefit of his evidence and that has been circulated to the members. If you want to ask any new questions, you may ask.

Mr. Dhar, the evidence that you give is published and whatever you say will be printed and published and given to our Members and also laid on the Table of the House and even if you want any particular portion to be kept confidential it will be published and given to all the Members and laid on the Table of the House.

We had a discussion with you at Lucknow. The gist of that discussion has been distributed to all the Members. If you want to add anything you may kindly do so and then our Members will put some questions.

Shri Kashi Ram Gupta: I would invite the attention of the witness to one aspect that has been raised again and again, and about which a great controversy is raging—that is the period for the patent. One view is that it should be protected and it should not be more than 3 or 5 years. There is another view that it should be 10 years and another view is that it should be 16 years. I want to know the basis on which the period should be fixed.

If it is on the basis of return on the investment and all these things, it must be backed by some data. On that occasion no such data was given by you. If such data is there which can rather go to prove that such and such period will suffice—in certain special cases it may not be so; in general cases it may be so—please give us that data. This is the most crucial and controversial point. On the one side, there are the

scientists who say that the period should be the minimum. On the other side, there are the industry people who say that the period should be more. There is a midway between the two, which is the Government side and which is before us. Please elaborate on this point.

Dr. M. L. Dhar: I said in Lucknow, my personal opinion is that in the interests of the country and scientific and technological advance in particular, abrogation of patents is ideal. I still hold to that view. However, if a stand is to be taken that patent in some form or other has to remain, I suggest that a patent must be given from the date of first filing for a maximum of 10 years, because filing of detailed specifications takes some time, or from the date of sealing 7 years, whichever is lower. The other part of the question is: on what do I base these figures of time? As a laboratory worker, I should like to point out that a research worker in a laboratory, as soon as he has found out that one of his materials has biological activity and has potentiality of being used as a drug, files a patent. He works on this and tries to complete the biological data on this point within a period of one to one-and-a-half years. During the same period, a good laboratory gets going on developing the industrial method of making this compound. Then comes the stage of chronic toxicity tests, that is, you want to find out over a period of time whether it is going to be toxic to the human system or whether it is going to be harmful to the progeny of the person who is taking this drug. So that takes another one year. So it comes to 2½ years. I am talking of a good laboratory which means business. So, 2½ years is, in my opinion, sufficient for this. Then comes the clinical pharmacological test where the drug is tried on normal human beings, which again is done by the laboratory itself. This test is to find out what will happen if the compound is given to a normal person who is not suffer-

ing from any disease. That takes another six months. So you have in all 3 years. By this time, the laboratory must have developed also the know-how for the production of this compound on a commercial scale. Then you must take one to two years for complete clinical trials. If the clinical trials indicate that there are no harmful effects from this drug, it comes to the market. From this date, five years is a very very considerable time to make whatever money anyone wants to make.

Shri Kashi Ram Gupta: This is the main point on which I put the question. How can it be possible for a concern to take out money in five years when the amount of investment is very huge? Has it been calculated on a commercial basis or only on a pilot project basis?

Dr. M. L. Dhar: I am a research man essentially and my opinion is based upon the data which I have gathered from the industrialists in this country, in the United States and in Europe. It is well-known that any industrialist must make most of what he has in the first three years after the introduction of the drug because they make a very very pronounced effort on advertisement or what they call 'market promotion' of the drug as soon as the clinical trial is over. As a matter of fact, they invest very nearly twice the amount and sometimes more on this aspect of the problem than they do on research. Therefore, it is my belief that a period of five years is thoroughly sufficient for a drug. Further it is now accepted by people in this field of drug research that the average life of a modern drug is 5 to 7 years and at the outside, ten years. So if the life of a drug is that limited, the drug industry must make the money in the shortest possible time.

Shri Kashi Ram Gupta: The industry has given us a different picture altogether. They try to show that 5 years is not at all sufficient for

them to make up the money. So, is that a wrong statement of fact according to the information that you have given us, or that has got some other aspect which remains unexplained?

Dr. M. L. Dhar: I am not competent to comment upon the data provided to you by the industry. I am only saying that I am a scientific worker and I have been in the research field for over a quarter of a century and I think that I am supposed to know a little about what happens in this field. Of course, one can get together statistics on points which are favourable to the view one holds. But I want to emphasise the basic point that the industries invest very much more money on the selling aspect of the various drugs. Here in India, we don't spend very much money on this, but in the U.S. and other countries, they spend 8 to 10 per cent on research and 25 per cent on propaganda. Now one can make all the money in one year if the drug is good. But if the drug is not good, one may not make any money. We had discovered an anti-thyroid drug at the CDRI, but fortunately there are not many people suffering from this disease and we cannot cover the expenses in too short a time. But there are life-saving drugs like tetracyclines and penicillin, where money gets made much faster than most people imagine.

Shri Kashi Ram Gupta: Is it possible for you to give statistical data on an average scale?

Mr. Chairman: How can he.....

Shri Kashi Ram Gupta: My point is whether statistical data of this sort can be prepared to show that 5 years would be enough.

Mr. Chairman: He is not a statistician. I don't think he has got statistics.

Dr. M. L. Dhar: I would like to answer that point. As I said a little

while ago, I would not like to comment on data given by an agency which is doing business. I am a laboratory worker and my contacts are fairly wide in the industry. There are drugs and drugs. There are life-saving drugs which save millions of people, and on which money gets made. There are other drugs, prestige drugs, on which money never gets made, but they are put on the market. I am sorry it will not be possible for me to give statistical data on this point.

Shri V. B. Gandhi: Is it your experience that in most advanced countries the period or the term of licence is as short as you propose. Our impression is that the term of a patent is much longer than you have proposed in most of the advanced countries.

Dr. M. L. Dhar: My principal belief is abrogation of patents. That is my ideal.

Shri B. K. Das: Only one point I want to know. We have got in evidence from other scientists also, they think that after invention of some drugs, it takes several years for clinical and other tests, but you are saying that it does not take more than three years or so to put in into the market as a medicine.

Dr. M. L. Dhar: I said 4 or 5 years from the date of filing the first patent. That is an sufficient length of time for a laboratory to get going.

Shri B. K. Das: There may be certain drugs which may take a longer period.

Dr. M. L. Dhar: I do not think so, Sir.

Shri B. K. Das: The other day we asked something about investigation on indigenous medicines and plants and certain information was given to us about that. And here also in your note, we have some figures on the work that has been done in this field. But I am not sure whether out of

these so many plants that you have experimented upon, only a few have been found to be effective. What is the reason?

Dr. M. L. Dhar: I think the reason is obvious. I think I explained the reason why one does not get as much success in indigenous medicines as one ought to. My personal opinion is that if ultimately we get one drug out of these 489 (the figure that you have before you), the Drugs Research Institute will be exceedingly lucky. Even these figures are high. They are at the primary and secondary stages. Many we drop at the secondary stage and even later.

Shri B. K. Das: Is it your opinion that out of these plants that you have experimented upon in your laboratory, only on these few you want to have follow up studies and others you discard. In that case, where is the chance of success?

Dr. M. L. Dhar: My data is based upon laboratory findings.

Shri R. P. Sinha: I would like to know from the learned witness as to what is the annual budget of his laboratory.

Dr. M. L. Dhar: I have said our annual recurring budget is today 28 lakhs and an odd thousand rupees.

Shri R. P. Sinha: I would also like to know how many patents have been taken by this institute.

Mr. Chairman: That also he has given.

Shri R. P. Sinha: Probably if he says it will get recorded.

Dr. M. L. Dhar: I thought it was on the record. I have provided all the information in the note that you have before you.

Shri R. P. Sinha: May I know what time it takes for a basic new drug to pass. Once it is established as a new

drug which is good for clinical purpose what time it takes for him to get it passed by the Drug Controller, so that he can use it on human beings.

Dr. M. L. Dhar: I did not have any difficulty with the Drug Controller.

Shri R. P. Sinha: I am not saying that. I want the time taken.

Dr. M. L. Dhar: I get my replies within 15 days.

Shri R. P. Sinha: I am not talking about replies to letters. What I am saying is this. What I understand as a layman, the Drug Controller has prescribed certain clinical tests, certain procedure that must be undergone, certain tests must be done before the Drug Controller sanctions a new drug to be used on human beings on a large scale. Now what is the time taken for completion of that?

Dr. M. L. Dhar: I thought I had answered that question earlier. It is at the outside 5 years, in a good laboratory. For the collection of this data, it takes upto a maximum of 5 years in a good laboratory. I would like to underline the words "good laboratory".

Shri R. P. Sinha: How many such good laboratories have you got in India?

Dr. M. L. Dhar: This is a very interesting question, Sir. I wish there were a hundred. We have one drug research, laboratory which is sponsored and provided for by the Government of India with a budget of 28 lakhs of rupees. We have one more laboratory sponsored by Ciba at Bombay who have a nice staff, about one-third our staff and about twice our budget. Effort is being made also by a few firms in Calcutta like the Bengal Chemicals, and at Baroda and so on. The total amount of money that this country spends on drug research, in my opinion, is of the order of 1 crore. As a sequence to this

question—because I think my answer will assume a meaning—I should like to explain, Sir, what expenditure is invested in other countries of the world on drug research. As I told you when you came to Lucknow, according to the information that I have, the United States of America's drug industry spent 360 million dollars on drug research last year, and the Government of the United States, through their National Institute of Health, have spent 1 billion dollars. Now this 1 billion dollars was not all spent on drug research as is understood commonly. It was spent on the understanding of the disease conditions as also on the finding of new drugs, so that the total research effort of the United State of America in 1965 was 1 billion 360 million dollars. Our total research effort, I said a little while ago, is of the order of 1 crore of rupees, or 10 million rupees, and our other research effort corresponding to that of the National Institutes of Health U.S.A. is of the order of about 1.5 crores or 15 million. So it comes to a total of 25 million rupees. If you want to stretch it as far as you wish to and put everything in, it comes to something like 3 crores of rupees, as against 1 billion 360 million dollars.

Shri R. P. Sinha: The witness has given very interesting figures. I will come to these figures later. At present I will take the thread of my original question. The witness has said that it takes for a good laboratory 5 years time to complete the clinical tests before the Drug Controller can certify a drug for commercial marketing.

Dr. M. L. Dhar: I said from the date a scientist discovers an activity in a particular material and upto the stage of clinical trials in a good laboratory it will not take more than 5 years. It may take less.

Shri R. P. Sinha: You have said because of our research expenditure being low there are not many such laboratories. Now, I would like to

know for an ordinary laboratory where the facilities are not adequately provided how many extra more years, i.e., more than 5 years, will be taken?

Dr. M. L. Dhar: I said a good laboratory. What time an indifferent laboratory will take, to that my answer is....

Shri R. P. Sinha: An average laboratory and not an indifferent laboratory.

Dr. M. L. Dhar: An average laboratory in various universities in India may never find it.

Shri R. P. Sinha: What would the correct average, say in India, for getting a clinical test?

Dr. M. L. Dhar: Not more than five years.

Shri R. P. Sinha: Mr. Chairman, he says five years period is taken up with regard to getting to the clinical test. Now, my second question is: how many years it will take for a laboratory stage pilot plant to pass into a commercial stage? Has that point been studied by the learned witness? Can he tell us in Indian conditions of technology what time it will take for developing a laboratory stage plant to commercial stage. Here we are not discussing any proposition in a theoretical way. We are here called upon to apply our mind to give a practical hope to this Bill which will be a workable proposition for the development of industry in this country. We are not concerned with theories. Therefore, I would like to know from the practical experience of the learned witness, of his own experience, that in the Indian conditions how many years it will take to get the commercial stage production after the laboratory tests are over?

Dr. M. L. Dhar: This will require an extended answer. The answer is two-fold. Firstly, are we dealing with a drug which has been discovered today or are we dealing with

a drug which has been announced and has been patented & produced by somebody. If we are dealing with a drug which has been discovered *de novo* under our conditions as they are today—I may point out in this connection that the conditions of technological development, availability of raw materials, availability of equipment which we need for working up these raw-materials we had nothing at all in this direction a few years ago. We are still getting most of the equipment from abroad. We still import a large number of intermediate chemicals. But in the recent past and now, very serious efforts are afoot by Government agencies and by private sector to get fine chemicals and intermediates and the equipment made in this country. Sir,—in the meantime naturally the technologists get trained. I will give an example. At the Central Drug Research Institute we started a process development unit roundabout four years ago. It took 1½ years to get it equipped. We started functioning about 24 to 30 months later. In this period we have worked on 15 different processes, synthetic processes, of producing drugs. I am talking about known drugs. We have developed the technical know-how about these. We have demonstrated the technical-know-how of a number of these to the industries. Two products are under-production by the industry in the country now.

Mr. Chairman: His simple question is: what time does it take from clinical stage to commercial stage?

Dr. M. L. Dhar: Sir, the words used are 'Indian conditions' and it wants an extended reply. Under the Indian conditions, if I know what I have to make, I should be able to bring it to commercial stage in about a year's time.

Shri R. P. Sinha: Will it be correct to say that on an average it will take one year to develop from pilot stage to commercial stage?

Dr. M. L. Dhar: I have said normally it will take, for a simple known drug, one year whereas it may take more than one year in others. On an average I said one year.

Shri R. P. Sinha: Is the witness aware that at Pimpri for haymycin it is now more than three years when they completed their pilot production and they have not yet gone into commercial production because of the technological development available in India and so many other difficulties are there.

Mr. Chairman: We have already gone to Pimpri and the information is available with us.

Shri R. P. Sinha: I want the answer from the witness.

Dr. M. L. Dhar: If you like, I would perhaps say something about haymycin because I happen to be concerned with Hindustan Antibiotics. I have earlier said we are making efforts to make equipment in this country. If we have to import equipment it must take time. I know the difficulties involved. Some of the equipment had to be imported.

Shri R. P. Sinha: What I understand from the witness is this: it takes some time in Indian conditions because we are technologically backward, we have got to develop our own process, we have got to import technology and equipment, therefore it takes some time to develop from the initial stage to the commercial stage. Now, supposing 6 year's time is required for clinical test, if I would say one to three years may be required for developing commercial stage production, that means that seven to nine years will be taken up before the commercial production starts. The witness has stated that seven years' period should be enough for grant of patent

Shri Kashi Ram Gupta: From the date of sealing.

Shri R. P. Sinha: Now, if 7 to 9 years, according to the witness, will be taken up for the purpose of coming into commercial production then the patent will have expired before it goes into commercial production. The witness has given very informative information with regard to research work that is being done in India. He has stated the amount of money spent in India and the amount of money that is spent in America. What is necessary according to the witness is that more and more money should be spent both on the research in the private sector and in the public sector. For the public sector Parliament can provide money to the Drug Research Institute without asking whether we are getting adequate return or not. So far as the private sector research is concerned as in America and other places, there should be adequate investment in it in time to come. We are going to have a patent law of seven years period and if we take about seven to nine years, according to the witness, to go into commercial production, how do we expect that the research in the private sector will develop either with the assistance of the Indian investment or by inviting foreign capital for research work? These are contradictions. I shall be grateful if the witness can throw some light on this subject.

Dr. M. L. Dhar: In my first statement that I made I said that the people in the laboratory do two things. They do biological tests of the compound. They also go on simultaneously developing a process for the production of the drug. So, by the time the drug is clinically tried the method for its commercial production is ready. Therefore, the figure of 7 to 9 years is not correct. I will say five years. I think I have answered the question, Sir.

Shri Kashi Ram Gupta: Question is this. CIBA spends, with one-third scientists, double the amount which our Institute spends. Is there some

reason behind it? What is the correct position?

Mr. Chairman: He does not say it is sufficient. He says more must be spent.

Shri Kashi Ram Gupta: No, Sir; I want to know the reason behind it. The point is that CIBA's expenses are unusually high.

Dr. M. L. Dhar: I would like to answer this question, Sir. It is common knowledge all over the world—I am not talking about the USSR, I am talking about Europe, USA and also our country—that industry always pays a lot more to their scientists, provides much better facilities than what the Government provides. Yet, it does not mean that spending a lot more money for lesser effort is wise.

Shri K. K. Warrior: In the ancient Ayurvedic system, in our place in Kerala, we are told that there are about one thousand combinations. Then it is called 'Shastra yoga.' I wish to know whether the Lucknow Laboratory is passing it only as a single substance or in combination with herbs, etc.?

Dr. M. L. Dhar: The correct assessment of the combination can be done in a hospital. If the hospital establishes the usefulness of a combination then the laboratory can work on the components of these combinations. I have been trying to say this before the Indian Council of Medical Research and Health Minister that clinical trials and introduction of modern medicines must go on simultaneously.

Shri K. K. Warriar: Now I wish to know whether the activity of a single substance will be the same or different?

Mr. Chairman: It has to be different. It cannot be the same.

Shri K. K. Warrior: Thirdly, how our old knowledge is integrated into

the new system I speak from political knowledge and not from scientific knowledge. What is the activity of the Lucknow Laboratory to enrich itself and enrich our knowledge already there? It has stagnated for some time. It is my information. Otherwise, I don't mind exploiting our drugs by somebody else—which they are doing.

Dr. M. L. Dhar: I would only say, as the learned Member here has himself said, that there is stagnation in this. The whole system has remained stagnant for about 2000 years. Knowledge has advanced. I, as a scientific worker, would like to look at it in an analytical manner. I would like to be assured that the knowledge that was available about 2000 years ago has not been passed on to us in an adulterated form. If this could be resolved it would be a wonder, and this is the effort which we have to make.

Shri K. K. Warrior: Is there any mutual understanding to integrate the modern scientific technological knowledge with the old wisdom so that we will have an indigenous content in the system with modern standardised pharmacology.

Mr. Chairman: That is what they are trying to do.

Dr. M. L. Dhar: We are doing our best to find out objectively by means of modern scientific methods what we can get out of the ancient drugs.

Shri K. K. Warrior: How long will you take to have a complete indigenous pharmacopoea in which all our Indian drugs would be included?

Dr. C. B. Singh: All of them!

Mr. Chairman: Out of about 4000 drugs how many CDRI has taken up?

Dr. M. L. Dhar: About 400 of them.

Shri K. K. Warrior: In how many we have succeeded so far?

Mr. Chairman: It takes time.

Shri Warrior: I don't say that all of them should be taken up at a time. I only want to know whether they are inclined to take up these ancient drugs also or whether they will be guided purely by the modern technology.

Dr. M. L. Dhar: The CDRI was set up to find out new drugs; whether they came from the ancient system or from the modern system was not emphasised. Naturally, we as a laboratory are anxious to discover new drugs from whatever system it may come. We are doing our utmost in that direction.

Shri K. K. Warrior: How many patents this Institute has taken now? How many of them are successful?

Dr. M. L. Dhar: I think I have given all the information in my note. We have reluctantly taken 36 patents.

Shri K. K. Warrior: Is there any possibility of foreigners stealing our processes?

Dr. M. L. Dhar: I don't think I can answer this question.

Shri K. K. Warrior: Have you taken patents for your drugs in foreign countries?

Dr. M. L. Dhar: Two or three.

Shri K. K. Warrior: Has it given foreign exchange earnings?

Dr. M. L. Dhar: We are not expecting at present.

Shri Prabhū Dayal Himatsingka: You know the difference between the patented drug and the developed drug as sealed for use. You think that your drugs will be accepted by the Doctors very quickly immediately after the drug is perfected, which will enable you to realise your investments?

Dr. M. L. Dhar: In a democracy, it will depend upon how much sales promotion the manufacturer is able to do and also on his persuasion of the Doctors. In a more rigid system of Government, if it is prescribed that the Doctors will use Drug A then the Doctors will have to use the Drug A.

Shri Prabhū Dayal Himatsingka: Will it be possible to sell these drugs quickly for the ordinary people who are not big manufacturers?

Dr. M. L. Dhar: I don't think that the drug industry can be run by an individual or as a cottage industry.

Dr. C. B. Singh: There was a proposal to have a hospital for drug trials.

Dr. M. L. Dhar: There was a proposal to have a hospital. But my personal belief is that a research laboratory finding out a drug must not have a hospital attached to itself because the clinical tests must be completely objective and independent of the influence of the laboratory.

Dr. C. B. Singh: Where are these clinical tests done now?

Dr. M. L. Dhar: King George's Medical College, Seth G. M. Medical College and also in the Indian Council of Medical Research.

Dr. C. B. Singh: As the proposal was to send them to Kanpur or Lucknow. I asked this question for my information.

Dr. M. L. Dhar: The Lucknow Medical College has tried one of our drugs on over a 100 patients by now.

Mr. Chairman: We thank you, Dr. Dhar.

(The witness then withdraw).

(The Committee then adjourned)

Minutes of Evidence given before the Joint Committee on the Patents Bill,
1965

Saturday, the 27th August, 1966 at 10.05 hours.

PRESENT

Shri S. V. Krishnamoorthy Rao—*Chairman*

MEMBERS

Lok Sabha

2. Shri Bibhuti Mishra
3. Shri P. C. Borooah
4. Sardar Daljit Singh
5. Shri Basanta Kumar Das
6. Shri V. B. Gandhi
7. Shri Kashi Ram Gupta
8. Shri Prabhu Dayal Himatsingka
9. Shri Madhavrao Laxmanrao Jadhav
10. Shri Mathew Maniyangadan
11. Shri Bibudhendra Mishra
12. Shri P. S. Naskar
13. Shri Chhotubhai M. Patel
14. Shri Sham Lal Saraf
15. Dr. C. B. Singh
16. Shri Balkrishna Wasnik

Rajya Sabha

17. Shri Shyamnandan Mishra
18. Shri M. R. Shervani
19. Shri R. P. Sinha

REPRESENTATIVES OF THE MINISTRY OF INDUSTRY

1. Shri K. V. Venkatachalam, *O.S.D.*
2. Shri B. N. Atrishi, *O.S.D.*

REPRESENTATIVE OF MINISTRY OF LAW

Shri R. V. S. Peri Sastri, *Deputy Legislative Counsel, Legislative Department, Ministry of Law.*

SECRETARIAT

Shri M. C. Chawla—Deputy Secretary.

WITNESSES EXAMINED

- I. (1) Shri S. K. Borkar, *Drug Controller, Government of India, New Delhi*
 (2) Shri P. S. Ramachandran, *Deputy Drug Controller, Government of India; New Delhi.*
- II. (1) Dr. A. Joga Rao, *Controller General of Patents and Designs, Government of India, Bombay.*
 (2) Shri R. V. Pai, *Joint Controller of Patents and Designs, Calcutta.*

1.(1) Shri S. K. Borker, *Drug Controller, Government of India, New Delhi.*

(2) Shri P. S. Ramachandran, *Deputy Drug Controller, Government of India*

(The witnesses were called in and they took their seats)

Mr. Chairman: I must repeat the formula. You know the evidence that you give is public. It will be printed and circulated to the Members of Parliament and placed on the table of the House. Even if you feel that any part of the evidence to be confidential, it will be printed and circulated. Have you got to say anything on the Patent's Bill? You may please give us your opinion.

Shri S. K. Borkar: Sir, the period of the validity of a patent as proposed in the Bill is ten years. I would submit that ten years is more than adequate to meet the needs of the situation, and if it is possible it may be lowered to seven years, because 7 years period is more than adequate to compensate for the research costs that the manufacturer incurs and will also give him sufficient returns for the expenditure that he makes on drug research.

The provision for licence of rights is absolutely a must because merely

having compulsory licensing which provision exists in the present Act is not enough for the development of this industry in this country. If it is possible by some ways to provide for getting the technical know-how from the patentee that would be a desirable addition to the present provisions.

These are the general remarks I have to offer in regard to the provisions of the present Bill and if there are any questions, I would be glad to answer.

Mr. Chairman: You said that the period of patent should be 7 years. The present Bill provides 10 years from the date of specification.

Shri S. K. Borkar: From the date of final specification.

Mr. Chairman: Suppose we make it 7 years from the date of sealing?

Shri S. K. Borkar: It depends upon the time taken between the date of filing the specification and the date of sealing. If it is about a year or so, one would not mind, but if it takes an inordinately long time, the actual period to which the patent would be applicable should be 10 years from the date of filing.

Mr. Chairman: 10 years from the date of specification?

Shri S. K. Borkar: From the date of filing the complete specification.

Mr. Chairman: What is the time given for filing the complete specification after the application?

Shri S. K. Borkar: It is 18 months.

Shri K. V. Venkatachalam: It is about a year. One year is given for filing the complete specification.

Mr. Chairman: The present Bill provides 10 years from the date of specification. Suppose we make it 7 years from the date of sealing?

Shri S. K. Borkar: After filing the complete specification till the date of sealing—that period we will have to take into account.

Mr. Chairman: What is that period?

Shri S. K. Borkar: That could be reduced to one year—that is from the date of filing the complete specification till the date of sealing. In that case, 7 years after the date of sealing is acceptable.

What shall have to be done could be done better perhaps by administrative action. Under the Industries (Development and Regulations) Act there are certain provisions which the applicant for patents has to comply with and perhaps these provisions could be made use of for getting the knowhow. Merely providing in law perhaps may not meet the situation because we cannot force the party to give the know-how. Then again we are not quite sure whether the know-how that is available is the best know-how. This is a matter which will have to be examined by a very high technical Committee. Even at the moment we are not quite sure whether the technology that is available here is the best technology. After all the criterion for a good technology and the index of that would be the ultimate price at which the product is made available. The better the technology the lower should be the

cost. But our experience here has been quite the opposite.

Mr. Chairman: Can administrative measures get us the technical know-how? Is it possible? It may be done by administrative measures—you said.

Shri S. K. Borkar: Both administratively and there should also be some provision in this Act.

Mr. Chairman: That is what I say. What do you propose as Drug Controller? Suppose you want to provide some provision whereby the technical know-how is made available.

Shri S. K. Borkar: At present the maximum rate of royalty has been fixed at 4 per cent. That is only to enable one to work a patent. If there was an additional incentive given—say if the best know-how is also made available, the rate of royalty could be slightly increased or some *ad hoc* money sanctioned—that would be a sort of incentive.

Mr. Chairman: What will be the proper percentage you would suggest?

Shri S. K. Borkar: If the know-how is made available, another 4 per cent. To-day I find a lot of money is spent by way of giving know-how to us.

Mr. Chairman: Have you got any idea of what they pay now for the know-how?

Shri S. K. Borkar: Those figures I do not know. Royalty is a sort of perpetual payment. If some *ad hoc* money could be sanctioned, we could save a lot.

Shri V. B. Gandhi: Is not the royalty a kind of consideration for giving the know-how?

Shri S. K. Borkar: I will come to you.

Mr. Chairman: Can we provide by law here for the additional percentage for know-how? Or should it be a matter for negotiation?

Shri S. K. Borkar: It would be a matter for negotiation. I cannot suggest what provision can be made in the law.

Mr. Chairman: Can you suggest how it could be brought into the Bill itself?

Shri S. K. Borkar: I will think over it.

Mr. Chairman: You consider the licence of right is a must. If the Government is to have that power, is it not necessary to pay some compensation to the man?

Shri S. K. Borkar: That does not preclude the paying of royalty. There is a provision in the Bill—clause 88(5).

Mr. Chairman: Where the Government want to import, do you think that the Government can import or get those medicines without even payment of the royalty?

Shri S. K. Borkar: You refer to Section 48, the right of Government to import. It would be quite fair if a provision is made for paying compensation.

Mr. Chairman: Yes, there should be some compensation; otherwise, it means expropriation.

Shri S. K. Borkar: Rate of compensation may be the same as provided in the case of royalty. About a—maximum of 4 per cent subject to tax.

Mr. Chairman: Suppose a patent is taken and then what steps are carried out? What is the time taken by your office to give a licence to the manufacturer?

Shri S. K. Borkar: In the case of an entirely new drug it takes on an average about 2 years.

Mr. Chairman: When it takes so much time, can you not reduce that period?

Shri S. K. Borkar: That depends upon the facilities available in the country for carrying out clinical trials and the nature of the drug. At the moment we do not have enough facilities. Suppose a new drug is developed at a stage where it has passed the toxicity and other pharmacological trials. When it comes to trial on human beings it has to go to the hospitals and the trials should be carried out under expert supervision. We try to see where the specialists are available and where the facilities exist. At present these are not enough. The result is if one individual specialist is busy trying one drug it takes him quite some time before he undertakes to try another drug. Unless these facilities are expanded, the time cannot be shortened. There have been some drugs which have taken as much as 36 months whereas there are others where it has taken about 8-9 months depending upon the nature of the drug.

Mr. Chairman: Also the side effects have to be taken into account.

Shri S. K. Borkar: Naturally clinical trials and toxicity tests are for that. We are trying to expand the facilities. In the case of drugs which are liable to be used on a long-term basis for chronic cases, as for instance the drugs for diabetes or drugs which patients have to live with such as anti-hypertension drugs, it is necessary to be very very cautious and you should also see the long term effects of using them.

Mr. Chairman: Does it take the same time in other countries?

Shri S. K. Borkar: In the United States, of late, since the Thalidomide incident, they are more cautious than what they used to be. There again they have got greater facilities. They spend a lot of money on medical research. We cannot strictly compare the facilities available there with the facilities that we have here. I should

say that for complete investigation, a period of about 2 years would not be too much. After all we must be sure that the drug is safe. Then it must be efficacious.

Mr. Chairman: We have heard that it takes about 5-7 years to bring it into use. How can we reduce the period to the minimum?

Shri S. K. Borkar: There are certain trials which cannot be accelerated, particularly if you want to see the long term effect of the drug.

Dr. C. B. Singh: Evidence has come before the Committee that it takes about 7 years.

Mr. Chairman: First the discovery is made and then tried on animals and then tried on human-beings. Evidence has been given before the Committee that it takes about 7 to 10 years before it reaches the production stage and the marketing stage. So there is hardly any time to recoup the research costs and also to make some profit. Your argument is that this period cannot be reduced.

Shri S. K. Borkar: I was making the point about the clinical trials only.

Shri R. P. Sinha: What are these clinical trials and who does them?

Shri P. S. Naskar: The Chairman has put three points specifically and you may answer those three points.

Shri S. K. Borkar: I stated only the time taken for clinical trials on human-beings. I was not referring to the earlier period.

Mr. Chairman: The point is that it takes about 4 to 5 years to discover the drug and then including the trials on animals and on human-beings it takes about 7 years to reach the production and the marketing stage.

Shri S. K. Borkar: It all depends upon the facilities that the manufac-

turers have. In most cases, the various operations are collateral.

Dr. C. B. Singh: The CDRI has got the best facilities—will you agree with this?

Shri S. K. Borkar: I agree with that.

Mr. Chairman: It takes about 3 to 4 years earlier also; that is what the evidence before the committee says.

Shri S. K. Borkar: Maybe in the case of some drugs the time taken is that much.

Shri R. P. Sinha: There is a point of order which I would like to submit for your ruling. This is a parliamentary committee and we enjoy all the privileges of Parliament. I would like to say that the Ministers and the officers must be careful before they answer our questions and should also be conscious of this fact that on factual matters they do not mislead the committee. The Ministers and the officers may mislead the Cabinet and we don't know what happens there. But misleading the parliamentary committee involves a breach of privilege.

Mr. Chairman: I agree with you, but there is no point of order.

Shri Bibhuti Mishra: You just now mentioned that the period of validity of patents after sealing should be 7 years. What did you suggest to the Government about this period?

Shri S. K. Borkar: Our original proposal was 7 years. We tried to put our own views....

Shri P. S. Naskar: To the Health Ministry.

Shri S. K. Borkar: Yes, 7 years from the date of final specification. 7 years has been made into 10 years perhaps to accommodate the various views as represented to Government.

Shri Bibhuti Mishra: How much time will it take for the department to finally seal the patent from the date of application?

Shri S. K. Borkar: The Member probably wants to know how long it will take for anyone to put into the market a drug from the date it has been patented.

Shri Bibhuti Mishra: How much time your department will take to finally seal the patent from the date of its application?

Shri S. K. Borkar: My department is not concerned with the granting of patents.

Mr. Chairman: Mr. Mishra, he is the Drugs Controller.

Shri Bibhuti Mishra: But he is an expert and he may give his views about this.

Mr. Chairman: The Patents Controller is coming to give his evidence and you can ask him this question.

Shri Bibhuti Mishra: What is your view about India becoming self-sufficient in drugs and medicines and how long will it take?

Shri S. K. Borkar: First we have to build up our basic organic chemical industry and till such time as we don't have the basic organic chemical industry we cannot hope to become self-sufficient. Attempts are now being made to start Hindustan Organics; maybe next year it might go into production. It is only then we can think of self-sufficiency.

Shri Bibhuti Mishra: Can you give us any idea as to how much of medicines and intermediates we get from abroad?

Shri S. K. Borkar: About the patented medicines, as it is commonly understood, there is a slight difference from what we mean by patents in this

Bill. The common conception of a patent medicine is any tonic. But anything that you take as a patented medicine is commonly deemed to be a patent. That is not the meaning conveyed by patents in this Bill. The total import bill in respect of drugs including the chemicals and intermediates comes to about Rs. 13 crores.

Mr. Chairman: Can you give the break-up?

Shri S. K. Borkar: I will certainly send the information. Intermediates worth about 2½ to 3 crores are imported. We don't allow the finished drugs to be imported. We get the things in a basic form; basic drugs are imported and then formulated.

Shri Bibhuti Mishra: In India certain factories have been set up on collaboration basis. As the Drug Controller, are you in favour of collaboration?

Shri S. K. Borkar: In the absence of our own industry and in order to maintain the health of the people, collaboration is a second line of approach. The first line of preference would certainly be to have our own industry whether it is in the public sector or in the private sector. Collaboration will come next. We must have our own industry. But if that is not possible, then we can go into collaboration.

Shri Bibhuti Mishra: You said that we import Rs. 13 crores worth of drugs and out of that Rs. 2½ crores worth are intermediates. Can we get alternative supplies? For example, if we don't get sugar, we can use gur.

Shri S. K. Borkar: Whether it is sugar or gur, what is needed is sugarcane. Now when I mentioned the Hindustan Organic Chemicals, I was referring to the basic industry. It is only then we can think of a lower chemical or a higher chemical. At the moment, we don't have any basic industry.

श्री विभूती मिश्र : पटेंट दवाइयां क्या आप समझते हैं कि १०० परसेंट सही होती हैं।

Shri S. K. Borkar: The quality of the drug has no relation to patents. The quality is governed by the Drugs Act. Whether a drug is patented or not, the standards are controlled under a separate legislation.

Shri Bibhuti Mishra: In Ayurvedic medicines there is no patent. But it has also got some formula. Any doctor can produce the medicine from that formula, like Chavanprash. If the doctor makes it well, then it works. So patent is harmful to India.

Shri S. K. Borkar: Patents relate only to the basic drugs and not to the formulations.

Shri Sham Lal Saraf: To what extent have our laboratories shown all-round progress in ensuring creative capacity so that they are able to manufacture these basic drugs?

Shri S. K. Borkar: So far as the development of new drugs is concerned, our contribution has not been very sizeable. But so far as formulations are concerned, our industry has done very well and it can compare with any in the world. About basic drugs, there are a few factories where we have started making them from intermediates and even lower chemicals. In this connection, I would refer to the attempts made in the Calcutta and Baroda regions. There are two or three firms there who have been pioneers in this effort and I might make myself bold to mention their names—the Bengal Immunity, the East India Pharmaceuticals, Bengal Chemicals and Alembics. Bengtals and Alembics have done their best to make their drugs from the basic stages without any foreign know-how and without any foreign collaboration. They have done much better in the manufacture of basic drugs than some of the Western India counterparts.

Shri Sham Lal Saraf: Out of the total drugs that are being prescribed, only 2 per cent are patented drugs and out of this, 98 per cent is imported. Now keeping that in view, may I know how our Drug Controller proposes to remain in touch with the creative capacity vis-a-vis the life-saving drugs being achieved or maintained in the foreign countries, particularly in the advanced countries? How does he propose to do it when he suggests that against the accepted period of registration of these patentable drugs in the rest of the world, particularly the advanced countries, and a period of 10 years initially as recommended in this Bill, he still wants 7 years?

Shri S. K. Borkar: In regard to the first question, namely, that out of the drugs that are consumed in this country, only 2 per cent constitute the patented drugs, Sir, I beg to differ ...

Shri Sham Lal Saraf: It is not my statement; this is what we have been given.

Shri S. K. Borkar: I really do not know the source. Here I have got only a cross-section of the drugs which are currently marketed in this country and out of a total turnover of Rs. 150 crores in drugs, the patented items constitute about Rs. 60 crores worth. It may be, Sir, that the drug ingredient in a tablet or in an injection forms a small proportion of the total cost or the price of the formulated product. For example, I will take the case of a drug which is used against inflammations. Now if you go into the cost of the drug itself, it may be about 8 paise in a five milligram tablet—I am only giving you a rough idea; if I am allowed to calculate, I will be able to give a correct figure, but now I am only giving a case in point. When it is sold, I will have to pay something like 80 paise. If you take 80 paise as the turnover, the ingredient is only 10 per cent. From that point of view even, I guess that the statement that only 2 per

cent of the patented drugs are in use in the country is far below the factual position.

Mr. Chairman: What is the percentage according to you?

Shri S. K. Borkar: About 60 per cent of the drugs currently marketed consists of patented drugs. That is to say that in these formulations there is an ingredient which is patented. Now we say that our drug industry has made phenomenal progress. Certainly from Rs. 10 crores in 1948 to Rs. 150 crores today is really phenomenal progress. But if you analyse the figures to see how this amount of Rs. 150 crores is made up, I would say that at least 50 per cent of Rs. 150 crores consists of drugs which are sold over the counter. Tonics and vitamins and medicines like anacin and aspro constitute by and large a large share of this Rs. 150 crores. So, if we exclude this, the remaining portion of the drugs—say about Rs. 80 or Rs. 90 crores—is actually prescribed by the physicians. Out of this amount of Rs. 90 crores, I would certainly say that at least Rs. 60 crores are those which are patented, or which contain an ingredient in them which is patented.

Shri Sham Lal Saraf: Another thing. It is corollary to this question. Is it 60 per cent from the point of view of ingredients as far as the drug is concerned or from the point of view of the total cost factor?

Shri S. K. Borkar: It is from the turn-over.

Shri Sham Lal Saraf: You mean the sale price, not the cost.

Shri S. K. Borkar: Yes.

Shri Sham Lal Saraf: I was under the impression that it is too less a proportion. Because of the explanation that he has given, it seems the proportion is much more. All the same it becomes very necessary for us to know one thing. Most of the

foreign know-how is imported into this country, particularly with regard to these basic drugs and advanced drugs and all these life-saving drugs. When compared to the rest of the advanced countries of the world, he suggests that the patentable period under these registered patents should be brought down to 7 years. May I know whether it will be compatible with all that is prevalent in other such countries, whether they could be prepared, or such persons who are in the possession of this know-how in those countries will be prepared to come to this country or allow this country to import the know-how.

Shri S. K. Borkar: Foreigners may be reluctant to come under these conditions. But that itself might promote our own industries. That might be conducive to ourselves becoming self-reliant. If anything comes in the way today in our becoming self-reliant, it is the Patent Law.

Mr. Chairman: They say, necessity is the mother of invention.

Shri Sham Lal Saraf: A little earlier, the Drug Controller said that we are pretty backward in creative capacity with regard to the basic drugs and at the same time he says if we almost ban indirectly or discourage import of foreign know-how or inventive inventions, it will help us, because, as you said Sir, necessity is the mother of invention. We agree. But how will he balance the two. Whether in his view the first position will be correct or the second. If the first position is correct, he will have to explain how it will be possible for this country to remain in touch with the modern progress in the advanced countries of the world if we directly or indirectly ban import of know-how into this country.

Shri S. K. Borkar: In any case, we shall have to be in touch with the developments in other countries. Now to be in touch, to be acquainted with

the developments in other countries, whether it is necessary for the foreigners to come here or can we not do it ourselves is the question. The literature is there, the patents are published and it is for us how to organise our own services, our own departments and to get the know-how.

Shri Sham Lal Saraf: Another question. It may not have a direct bearing on this subject. Will you please apprise us as to the prevalence or the presence of spurious drugs in the market? Whether you have got anything to do with that, whether you have in any way been able to lay your hands on the spurious drugs that are being manufactured. You may be knowing that spurious drugs that appear in the market today are almost the drugs that have been patented. To that extent also, spuriousness has come into the market. May I know what he has got to say with regard to that.

Shri S. K. Borkar: A reply to this question will involve entering into the provisions of the Drugs Act, but without trying to enter into that I might say that first of all the common conception of a spurious drug is that any drug which is not standard is spurious.

Mr. Chairman: Sub-standard drug.

Shri S. K. Borkar: Yes, sub-standard drug. There must be a clear distinction between spurious and the sub-standard drug. Every drug manufacturer in this country must be licensed, otherwise he cannot make drugs. The Government of India had appointed a Committee under Mr. Naskar—the Drugs and Equipment Standards Committee. They went thoroughly into this question and they did come across spurious drugs in the market i.e. drugs which were quite different from what they were represented to be, and they came to the conclusion that the incidence of spurious drugs is not so large as it was

originally supposed to be. Then again, spurious drugs were manufactured by unlicensed manufacturers whose whereabouts were not known and who were not licensed of course. But amongst the licensed manufacturers, there are a large number of drugs which do not conform to standards. It is all uniform whether it is a big manufacturer or a small manufacturer. Even we have got reports on samples manufactured by very good manufacturers which were not found to be of standard quality. It is mostly in respect of vitamin preparations which are liable to deteriorate, whose standards go down. But in regard to spurious drugs we are concerned with it and we are taking whatever steps we have to take to see that spurious drugs are not coming into the market.

Dr. C. B. Singh: I wonder if you have seen the Supplementary Memorandum on the Patent Bill of OPPI. If you see Appendix No. 5—it is a very important Memorandum and I want you to look into it carefully—they have given statistical figures of the various drugs and the time it took to bring them into the market from the date of filing of the application, from the date of the patent right being given, in the two countries—India and the U.S.A. If you look to the figures given for India, you will be surprised that except one drug, majority of them have taken more time—you can see from top to bottom, I have drawn a line there. In view of the statistical figures that are given there, would you like to change your mind that it takes round about 5 to 6 years to introduce a drug into this country.

Shri S. K. Borkar: Now I will read only the first item—Chlortertracycline. Under that in India patent was granted in 1950, but the product was introduced in 1959—i.e. space of 9 years. Now to what this is attributable is the question.

Dr. C. B. Singh: That is not the point. Kindly see the figures. The figure is given all along about the

period taken in India from the date of the filing of the application, figure is also given from the date of grant of patents right and then the date of introduction. Kindly see that and let me know what time you think it takes to produce the drug in this country.

Shri S. K. Borkar: With due respect, unless you know what is it that prevented them from introducing the product earlier, it is difficult to say. There might be various reasons which may be covered by the provisions of the Drugs Act or Industries (Development and Regulation) Act. They may not be wanting to introduce the product because they may not be wanting to manufacture it here if they could import it. These are some of the considerations which weight with them before introducing the product in the country.

Dr. C. B. Singh: Explanations are also given. I wanted your opinion. In view of these statistics will you still stick to the figures you have given? This is an important point.

Shri R. P. Sinha: I would like the Drug Controller to examine the reasons given there and give us a note as to whether the reasons that are given here are correct or not. Secondly, we in this Committee are to be guided by the time actually taken. We are not going behind the reasons. We have to go by the factual data available in this country. Based on that we will draw our own conclusion. We want more help to correctly assess the situation. Based on that we will be guided by our own judgment.

Mr. Chairman: Before the manufacturer produces a particular drug, he has first of all to pass through the patent process. Then he must obtain clearance from you. Then he has to get clearance from the Industries (Development and Regulations) Act. Is there anything else?

Shri S. K. Borkar: So far as regulations are concerned, these are the only three.

Shri R. P. Sinha: The fourth one is obtaining foreign exchange.

Mr. Chairman: Please give us an idea of the time each of these takes.

Shri R. P. Sinha: We have to go by the actual position. We should not proceed on theoretical basis.

Mr. Chairman: You take two or three patent drugs and give us what time each has taken.

Dr. C. B. Singh: This is an important point. Otherwise we will be groping all the time in the air.

Mr. Chairman: Then he has to obtain the raw-materials; then machinery. Please give us a note on all these.

Dr. C. B. Singh: The Health Ministry has produced before us a comparative statement showing the prices of drugs in India and Pakistan. First of all, is there a patent law in Pakistan.

Shri S. K. Borkar: The patent law is the same there. Both of us inherited it from the British.

Dr. C. B. Singh: What according to you is the reason why the drug is cheap in Pakistan? Will you be able to throw some light on this?

Shri S. K. Borkar: That will be a hazardous guess on my part.

Shri R. P. Sinha: Then we can adopt the same method here also.

Shri S. K. Borkar: Perhaps the importer brings it at a lower price.

Shri R. P. Sinha: Please don't say 'perhaps'.

Dr. C. B. Singh: How many of the drugs are locally manufactured?

Shri S. K. Borkar: About India I can give this information. None of these drugs mentioned here under Imperial Chemicals is manufactured here. All of them are imported. Even the basic drug is imported.

Dr. C. B. Singh: Do you think that the import duty and customs are lower there?

Shri S. K. Borkar: I won't be able to say.

Shri R. P. Sinha: Will it be possible to find out?

Dr. C. B. Singh: This information may be gathered by your office. This is important.

Mr. Chairman: With the present relationship with Pakistan, we do not know whether we will get the information. Anyhow they will try.

Dr. C. B. Singh: Thank you. This is a statement giving the comparative prices of drugs in several countries. It is commonly said that the prices of drugs in this country are the highest. If you see this statement you will find that it is not a fact.

Shri S. K. Borkar: I will go through these figures. My guess is that in absolute terms you may be right. But in terms of the earning capacity, they are very high.

Shri R. P. Sinha: I could not follow.

Shri S. K. Borkar: If a drug costs in the United States five dollars, then that amount can be converted into rupees at the pre-devaluation rate and then you get Rs. 22. This drug may cost in India Rs. 18. On this basis you may say that it costs less in India than in the United States. But that is a fallacy because in India to earn Rs. 18 an average man has to work for ten days. From that point of view the price in India is very high. We shall not go by the absolute figures that may be available.

Dr. C. B. Singh: I think these are your figures. It gives you a comparison of current domestic and comparative prices in USA, Germany, Italy, Japan and India.

Shri S. K. Borkar: It is not mine.

Dr. C. B. Singh: These are the figures which are supplied to us by the office. Here we find that the prices of these drugs in India—with the exception of one or two countries—are lower than in many other countries.

Shri R. P. Sinha: If the earning capacity is less, if the cost of production of drugs in India is more, the selling price will also be more; because the selling price has to be equated with the cost of production.

Dr. C. B. Singh: Let his study and give the reply. This is an important point.

Shri R. P. Sinha: Mr. Chairman, I have only one question for you, and not for the witness.

Mr. Chairman: I am not an expert.

Shri R. P. Sinha: From the way you put questions, I can say you know much more than what we know. The point to make is this. They are Government witnesses. They are part of the same Government machinery, whether it is the Health Ministry or whether it is the Ministry of Industries.

Mr. Chairman: Birds of the same species!

Shri R. P. Sinha: Now, for us it becomes very difficult if we get two different sets of facts from the Ministry of Health and from the Ministry of Industry. I would like to have your ruling. I suggest that both the officers of the Ministry of Industry and the Ministry of Health sit together and check up the facts, instead of giving contradictory facts—I think in the presence of Shri Venkatachalam. Let us first bring out the facts. They have given two different sets of figures. Mr. Shah yesterday deposed before us that the production is two-third from the basic stage and we permit only such quantities of bulk imports of such drugs which are now being manufactured here. Now, he

says that ICI are only formulating drugs and they are not making any basic drugs. Two different statements are being made by two Government offices. I would like you to appreciate my difficulty. I suggest that both the officers of the Ministry should sit together and sort out among themselves and tell us what the facts are. I will illustrate. From where the manufacture is started? What is the quantum of manufacture of basic drugs here? They say something and they say something else. Both are quoting documents. Both cannot be correct. Evidence has been recorded and they have given statements which are contradicting each other on facts—on price, on formulas, on fact wherefrom the basic manufacture starts.

Shri Bibhuti Mishra: It is beyond our scope.

Mr. Chairman: It is all right.

Dr. C. B. Singh: One more question—important one. You know Prof. Kilbridge from USA has produced before us a chart which shows that the prices of patented drugs available in the general market have fallen over a number of years while the prices of non-patented drugs have more or less remained the same. Are you in a position to give your opinion on that?

Shri S. K. Borkar: I do not know the basis on which the Professor made the statement. But our experience is—I can support by facts—that drugs which are patented remain at a high level though in course of time they come down, but generally they remain at a high pitch. When the Japanese delegation came, they also gave some graphs and if we see those graphs we will find that there are certain drugs and that the prices of patented drugs remain at a high level. I can give you one concrete example. I will take the question of Tetracyclines—a life-saving drug. Its price was Rs. 3000 per Kg.....

Dr. C. B. Singh: We are not discussing this point.

Mr. Chairman: Let him finish.

Shri S. K. Borkar: The price did fall down. Today it is about Rs. 1157 per Kg. There is no doubt there has been a fall here, but the fall has not been appreciable as compared with the non-patent drugs. Penicillin, which is not patented, sells even in this country at 40 paise per m.u. If it is imported, it is 6 paise per m.u. In the case of non-patented drugs there is a steep fall in prices as against the patented drugs, and to support my submission. I can submit definite information on the patented as well as non-patented drugs.

Dr. C. B. Singh: I will like Mr. Borkar to give us a graph of the cost of non-patented drugs and patented drugs for the last ten years in this country. I will be satisfied.

Shri S. K. Borkar: I will do that.

Shri Prabhu Dayal Himatsingka: Penicillin is being manufactured by Government?

Shri S. K. Borkar: Both Government as well as private sectors.

Shri Prabhu Dayal Himatsingka: Government charges the same price as private sector?

Shri S. K. Borkar: Almost the same.

Shri Prabhu Dayal Himatsingka: The cost must be more; that is why they are charging more?

Shri S. K. Borkar: Might be. We may not have the latestest technology on Penicillin. But the fact is that prices are higher here than of imported Penicillin.

Shri Prabhu Dayal Himatsingka: Patent or no patent; the position is that because we cannot produce cheaper things, therefore the price is high? Patent does not come in the way?

Shri S. K. Borkar: Patent is only one of the contributory factors.

Shri Prabhu Dayal Himatsingka: Just assume that if there is a patented drug and the manufacturer says 'well, you are free to manufacture it'; can it be manufactured without some know-how being given by the party who had been manufacturing it?

Shri S. K. Borkar: That depends upon the drug. If it is entirely new, it will be difficult to manufacture with our old units without the know-how. There are a large number of drugs which could be manufactured and they are being manufactured even today by a process which has been developed in our own country.

Shri Prabhu Dayal Himatsingka: If the process is only patented, and not the drug, then there is no difficulty in manufacturing this drug?

Shri S. K. Borkar: There should be no difficulty, excepting, of course, if it requires entirely new technology, such as the anti-cancer drugs, in which case it may be initially difficult for our own people to do it on their own.

Shri Prabhu Dayal Himatsingka: The delay in introducing a drug manufactured here may be due to many factors and these factors will always be there. You will agree that if a drug is manufactured, having been manufactured the manufacturers will certainly be anxious to put it in the market as quickly as possible. He will also try to find all possible ways He would not be a party to the delay?

Shri S. K. Borkar: This is an assumption. Naturally the manufacturer will see to the profitability of it. If the size of the market is small and his investment is relatively large, he may try to postpone the manufacture of the drug till such time as the market develops. That condition will always be there.

Shri Kashi Ram Gupta: The witness has stated that out of Rs. 150 crores worth of drugs about Rs. 60 crores worth of drugs include patented drugs—may be in proportions. Now, how much of it is such which is totally patented drug and how much is there where ingredients are there in large proportions.

Shri S. K. Borkar: That will have to be worked out. If I have a multiple composition preparation, for instance, a tablet containing Aspirin....

Mr. Chairman: You may not give for each tablet but on the whole.

Shri Kashi Ram Gupta: My question is: how much out of these Rs. 60 crores worth of drugs—what percentage—are patented drugs.

Shri S. K. Borkar: I could give the exact information later but just to give the Committee an idea—I have taken production in 1965 of about 21 drugs—the cost of basic drug, as such, when manufactured here is Rs. 15.7 crores. If they were imported they will cost us Rs. 5.3 crores. When these drugs are formulated into products and sold in the market the total sales turnover is worth Rs. 61.2 crores.

Shri Kashi Ram Gupta: So it comes to 1/4 of the total production. Now, there are two kinds—one which can be used on a mass scale and the other which can be used in a particular disease. Can you categorise the value of these in these two categories, that is, how much is there which is used in mass scale and how much is there which is used in a particular or specific disease?

Shri S. K. Borkar: The items mentioned earlier, most of them, are used in mass-scale except for two or three. If the Member insists I can work out.

Shri Kashi Ram Gupta: Please work out and send it to us.

You are well aware that upto now patents have been taken by foreign

concerns and under the present Bill we are hoping that our own people will be able to come forward and have new patents. Are you in agreement with this idea of the present Bill or not?

Shri S. K. Borkar: Sir, our own people may not come forward for patents but the provisions of the Bill will enable them to manufacture the drugs here which are already known and patented. To be able to patent it must be entirely a new drug and that may take some time before our industry develops to that extent but the provisions of the Bill certainly will enable them to put up their own plants.

Mr. Chairman: So far as you are concerned you are in favour of this Bill.

Shri S. K. Borkar: Subject to the remarks I made in the beginning.

Shri Kashi Ram Gupta: The main point is: the witness says that they may not be able to have new patents whereas the purpose of the Bill is to enable them to have patents. That is the first purpose of the Bill and when he says they may not come forward.

Mr. Chairman: That may take some time but they will come forward.

Shri Kashi Ram Gupta: After what time they will be able to come forward.

Shri S. K. Borkar: That will depend on how our research progresses? How much money we are able to spend on research?

Shri Kashi Ram Gupta: Until and unless we specifically know where we stand....

Mr. Chairman: By and large this Bill will promote research and development and he says that this Bill is allright.

Shri Kashi Ram Gupta: My next question is: One is the invention side

of it and the other is production side of the present drugs. Now are you of the opinion that a clause like this may be put: 'That those who invent in this country may be given greater period and those who do not invent in this country may be given a smaller period'. Are you in favour of such a clause?

Shri S. K. Borkar: There should be uniformity. If you go for one principle that should be uniform. I personally am not for discrimination.

Shri Kashi Ram Gupta: What is generally the period taken by your Department for giving a certificate to put the drug in the market? Does it vary from drug to drug or is it uniform?

Shri S. K. Borkar: It does vary from 9 months to 3 years.

Shri Kashi Ram Gupta: Has it been compared with other countries?

Shri S. K. Borkar: Two years, I said, was the average. There are many drugs which have to be tried for longer period but the average comes to 2 years.

Shri Kashi Ram Gupta: It means it may take even three years. Have you got a list of such patented drugs which are in mass use and which are used for very important diseases and which are required at such intervals when such diseases occur. Have you got a list of such medicines?

Shri S. K. Borkar: I have got a list but that list is not exhaustive. I do have a list but I do not have the complete information about every drug that has been patented in this country

Shri Kashi Ram Gupta: You may scrutinise the list and categorise.

Mr. Chairman: What is the use?

Shri Kashi Ram Gupta: It will be useful for us in determining the period.

Shri P. C. Borooah: You are a Drug Controller for a long time and one of your main functions is to see that spurious drugs and sub-standard drugs do not find their way in the market. Are you satisfied that in the present Bill enough has been provided in regard to that?

Mr. Chairman: This is a patent bill and not drug control bill. We are not concerned with it.

Shri P. C. Borooah: Are you satisfied that the Bill, as drafted, will go, at least, to some way in putting down the spurious and sub-standard drugs?

Mr. Chairman: There is nothing he has to say.

Shri P. C. Borooah: If you have no suggestion that means you are fully satisfied—

Mr. Chairman: Does this Bill in any way help in controlling the spurious drugs?

Shri S. K. Borkar: It is entirely a different aspect.

Shri R. P. Sinha: I would like to know what does the Controller think as to the impact of patents on the price structure of the drugs?

Shri S. K. Borkar: Sir, the impact of patents on price structure is that the prices of drugs are high and they are maintained at a high level for a considerable time.

Shri R. P. Sinha: I want to know: (i) whether it is a fact that our drug prices have been pitched at 1963 prices level; (ii) while determining the prices the machinery of the Government—whether it is Drug Controller or Ministry of Industry—go into the entire cost structure of the drugs and then they fix up the price at which any particular drug will be sold. If that is so, how can we complain that the patent system

is responsible for the high prices? If the Government is satisfied that there is profiteering going on in a patented drug can they not force that manufacturer to bring down the price? Do they not take into account the cost structure while determining the price of any drug under the Essential Commodities Act?

Shri S. K. Borkar: Sir, the first part of the question relates to the pegging of the prices at the level of April, 1963. This was done under the Defence of India Regulations and now it has been done under the Essential Commodities Act. All that the Government at that time, following Chinese aggression, did was to accept the prices as were available in April, 1963 and they did not question the price structure of the manufacturers. The anxiety of the Government was to see that there was no further rise in the prices of drugs. Government had not determined the cost or price structure of those drugs.

In regard to the second part of the question, Sir, to determine the cost structure of a patented drug requires a large machinery. Now a patent drug is assumed to be a new drug for which you cannot have a parallel to compare even the prices. It is only when you have a corresponding drug with which you can compare that you can arrive at some approximation of price but in the case of an entirely new drug it is not possible unless a Body like Tariff Commission goes into the question.

Shri R. P. Sinha: One of the main complaints is that because of patents the prices of the patented drugs are high. Now, I would like to understand from the Drug Controller whether he has got enough powers under his armoury, under the various laws, under the Defence of India Rules or Essential Commodities Act so that when he feels that a particular set of drugs or a particular new drug or a patented drug is

selling at a very high price and the particular manufacturer is profiteering he can enquire into the cost structure of that particular drug or he does not have any control over the selling price?

Shri S. K. Borkar: So far as the Drug Controller is concerned he does not have the powers. The Government does have both under the Industries (Development and Regulation) Act and also under the Essential Commodities Act.

Mr. Chairman: Government has powers....

Shri S. K. Borkar: It is the Ministry of Industry and Petroleum and Chemicals.

Mr. Chairman: And you don't have powers.

Shri S. K. Borkar: I do not have.

Shri R. P. Sinha: He may not have the power. What I want to understand, to check up my own self, is if a patented drug is there of which the Drug Controller brings to the notice of the Government that a particular manufacturer is charging high and we have got the machinery to control the price of that drug. So, we can very safely construe that the patent cannot stand in the way of bringing down the price of any patented drug.

Here is a statement which has been given by the Drug Controller in which he has given a list of the drugs with the quantity of imported drugs and the indigenously manufactured; then he has given the retail price and sale value. Could you tell us to which period it refers to?

Shri S. K. Borkar: The figures in the statement pertain to 1965 and this was compiled only recently.

Shri R. P. Sinha: The figures given in the statement refer to 1965. Now, I would like to know whether you

have given the retail prices of all these things. If so, can you give us the cost of production of some of the items to see whether the retail prices are proper or not; or they are reasonable or unreasonable.

Shri S. K. Borkar: This statement was prepared with a specific purpose of giving information to the Committee as to the extent to which patented drug figures in the overall turnover of the drugs.

Shri R. P. Sinha: Do you mean to say that all the names of the drugs mentioned here are of patented drugs?

Shri S. K. Borkar: Yes, Sir.

Shri R. P. Sinha: The retail prices are given here. Whether the retail prices of patented drugs are reasonable or unreasonable? All these prices mentioned here, I presume, must be prices as settled by Government.

Shri S. K. Borkar: No, Sir. They are those that are given in the price-lists of the manufacturers.

Shri R. P. Sinha: If the manufacturers charge more price than 1963 price, you will always come on their head.

Shri S. K. Borkar: That is correct. One can presume that these were also the prices which were available in 1963.

Shri R. P. Sinha: Quite right. May I know whether this is the retail price as approved by Government of India under the Defence of India Rules?

Shri S. K. Borkar: I would not call it as approved price but as pegged price.

Mr. Chairman: Does it mean that that is what is accepted by the manufacturers?

Shri S. K. Borkar: It does mean. But, the Government does not go through the price structure.

Shri K. V. Venkatachalam: Just prior to the Chinese invasion, certain prices were in force. Government, at that time, wanted to see that there was no unreasonable rise in prices. They used the Defence of India Act to peg those prices at that level. So, it is not correct to say that there has been an investigation into prices and you cannot take it that the Government has agreed that those prices were reasonable.

Shri R. P. Sinha: Prices which are given in this statement are those that have been pegged under the Defence of India Rules, 1963.

Shri S. K. Borkar: I would not like to answer this question. I would only say that for such of them as were marketed in 1963, the prices were the same as were prevailing at that time.

Shri R. P. Sinha: This is the pegged price of those items.

Shri S. K. Borkar: That is correct.

Shri R. P. Sinha: Am I correct to assume—this is my misunderstanding—that if a new drug comes out, under the Essential Commodities Act, you have got to obtain the sanction of the Government before fixing the prices?

Shri S. K. Borkar: It is so now.

Shri R. P. Sinha: Nobody can market any drug without getting the prior approval of the Government.

Shri S. K. Borkar: That is correct.

Shri R. P. Sinha: I think all those items have got the approval in that sense.

Shri S. K. Borkar: No, Sir. These are the prices of drugs as in 1963.

Shri R. P. Sinha: I know that. There was also a press report that many manufacturers wanted the price to be raised again because the production cost had gone up. There are many new things which have come out in the field. They wanted the approval of the Government of India. I presume that for every drug that is marketed in India, the prices are checked and approved by the appropriate ministry. Are these figures in the statement related to those drugs?

Shri S. K. Borkar: I will explain that. Those figures that are shown here relate to the price-lists that were available to 1963. At that time, the Defence of India Rules did not require probing into the prices. Now that is required under the Essential Commodities Act.

Shri R. P. Sinha: Will you kindly send us the price-lists to check up whether these are correct figures or some variations have taken place.

Shri S. K. Borkar: Are you talking of the approved price-lists?

Shri R. P. Sinha: I am talking about the items which are mentioned in the lists.

Mr. Chairman: How could that help us?

Shri R. P. Sinha: I would like to have the list as approved under the essential Commodities Act for patented drugs as mentioned here.

Shri S. K. Borkar: We do not have the approved prices of the drugs. These are the prices fixed under the Essential Commodities Act. At the moment there is not a single preparation which has been examined and price determined under the Essential Commodities Act.

Mr. Chairman: Government has not fixed any price.

Shri S. K. Borkar: They have not fixed any price.

Shri R. P. Sinha: But, the Government have powers to go into the cost structure of any drug.

Shri S. K. Borkar: Yes, Sir.

Shri R. P. Sinha: I would like you to refer to this statement. Let me draw your attention to column 5 in which you have given the quantity produced indigenously. You have given only three, four or five items which are being produced indigenously according to the statement. Am I to conclude that the rest of the items which are shown here are not being produced indigenously?

Shri S. K. Borkar: There are two or three items which are made indigenously viz., Chlorpropamide (fourth from the bottom), Amodiaquin etc. I do not have the figures of the local production. That is why it does not figure in this statement.

Shri R. P. Sinha: Dr. Shah of the Ministry of Technical Development has also given some figures about these items. He says that most of these items are being manufactured and many more are going to be manufactured indigenously. Then, there are figures which I will give you. There are certain items which, Dr. Shah says, are not included in the Fourth Five Year Plan. Number one is the first item 'Flouthane (Halothane)'. Next is the item 'Spiranolastone' on Page 2. The others are Chlor-diazepoxide and Thioridazine on page 2. These are shown as not being manufactured. Now, what happens is this. Every product in this country is governed by the Industries Development Regulation Act. It is controlled by that. Only those items can be manufactured which get clearance from Government. I understand that the items that you have mentioned just now are being put in the Fourth Five Year Plan as to be manufactured. The Government would not like to manufacture them for the reasons best known to them. There are good reasons for that. There are other items also which have recently been included in the production programme. They

are: Neomycin, Erythromycin, Triamcinolone and Ethisterone (page 2.) These are the new items which have recently been brought under the programme of manufacture. Industrial licensing procedure has undergone some change under which some have been given licences while others have not been given a licence. They have given us certain figures which were also circulated to us the other day. What is the target that has been fixed for that. Unless those figures are also given here, this statement of yours appears to be misleading. Therefore, what I suggest is: this statement given to us shows as to what are the items that are now being manufactured and What are the items that are now not being manufactured. Different things have come to us from different Ministries. Therefore, both of them should sit together and give us one set of figures so that there may not be any complaint later on.

Take item No. 3—Chloromphenicol—25 tons. One thing we have finalised is: the patent is not so important; it is not an important factor for controlling the price.

Mr. Chairman: We are not on the control of prices of drugs now. Your query may be interesting from that point of view. How is it important from our point of view—I do not know. We have to get whatever information we want on the Patents Bill.

Shri R. P. Sinha: Patents Bill is an instrument for bringing down the prices of drugs.

You may give that information afterwards.

Mr. Chairman: You are going far beyond the scope of the Bill.

Shri R. P. Sinha: The Patents Bill is an instrument for manufacturing any patented drug. What I say is that both the Ministries should sit together and give us a complete statement.

One Ministry says that the Patents Bill is important from the point of view of regulating production and controlling and regulating the prices.

Mr. Chairman: He has said that certain drugs have been sanctioned for manufacture here and others have not been sanctioned. Prices we are not concerned with. So far as the cost is concerned and so far as the manufacturing programme is concerned we have nothing to do.

Shri R. P. Sinha: I am glad you have confirmed this.

Mr. Chairman: Still you are pursuing.

Shri R. P. Sinha: As you have said, I will not pursue that. I would like to know from the learned witness something about the clinical tests. I would like him to explain to me how these clinical tests are being conducted and what are the different stages and how it works.

Shri S. K. Borkar: It is a test carried out on human beings to verify whether a particular drug about which certain claims are made is effective and whether it is safe. This, in substance, means clinical trial.

Shri R. P. Sinha: How do you do it. What are the stages?

Shri S. K. Borkar: First of all we screen the pharmacological data and the toxicity data. Once it is found that when used on animals the drug can be considered to be safe, it is then given to experts in the particular field. If it is a cardiac drug, then we send it to the specialist in cardiology and we prefer those institutions which are attached to medical colleges and hospitals so that a full-time officer there devotes himself to carry out the clinical trials. Then he chooses the patients under his supervision and finds out the defects in the drug. This takes quite a long time. Then there

are certain drugs which are to be used for diseases which are life-companions like diabetes. The long term effects of these drugs have also to be found and it has to be seen, whether the kidneys or any other organs are affected. After the specialist is satisfied or if he is not satisfied, he gives his objection on the drug and he gives his recommendation that the drug has to be administered in such and such way. If the investigator says that the drug is quite perfect but such and such precaution has to be taken the manufacturer takes note of it and mentions it in the literature so that any physician may know exactly how to administer that new drug.

Shri R. P. Sinha: I have read some books and I have found that in some of the new drugs which were experimented clinically in foreign countries, particularly, in America, they had a very bad effect on the progeny and after that they had become very strict in these matters. I also understand that these clinical test sometimes kill the patients. There is a lot of criticism against these clinical tests being done on human beings. We have, therefore, to be very very careful and not in a haste to get a new drug, especially at the cost of many patients. Therefore, I would like that this clinical test should be not so much with a view to test its efficacy but it should be seen that no harm is done on the patients on whom the trial is being done. Keeping that in view—where that abundant precaution is necessary not to injure any patient who subjects himself to clinical tests, what do you consider should be the time for clinical test that because of the lack of facilities the time taken should be such not with a view to get a patented drug to commercial production quickly but to see that no harm is done to the patient and that maximum precaution is taken.

Shri S. K. Borkar: It will depend upon the nature of the drug. In acute diseases where there is some infec-

tion the chances of a drug being used will be only for a limited period—may be about a week; so the question of chronic toxicity of such a drug will not arise. On the other hand, in case of drugs such as hypotensives and anti-diabetics which are bound to be used frequently and continuously we must lay greater emphasis on the safety aspect. So, we cannot compare both the types of drugs in the same plane. Whereas in one case you require to be ultra-cautious to see that as a result of a long-term action there is no harm done, in the other case where the diseases are acute, you cannot prolong your trial to the same period. So there are types of drugs where this period will vary. That is why I said earlier that on an average our own experience is that the average is about 24 months.

Shri B. K. Das: In the beginning Mr. Borkar said that he is in favour of some compensation to be provided in the case of Government use. Can he give instances of other countries where such provision is there?

Shri S. K. Borkar: I won't be in a position to give that.

Shri B. K. Das: Cl. 48 there is no provision for compensation, but in clause 100 there is a provision. In that case, can you not do away with clause 48 altogether?

Shri S. K. Borkar: How it should be framed is a matter for the committee. But the principle, Sir, is this that Government should not be prevented in particular circumstances to import a drug for their own use.

Mr. Chairman: Thank you, Mr. Borkar.

(The witness then withdrew).

II. (1) Dr. A. Joga Rao, Controller General of Patents and Designs, Government of India, Bombay.

(2) Shri R. V. Pai, Joint Controller of Patents and Designs, Calcutta.

(The witnesses were called in and they took their seats).

Mr. Chairman: Well, you know the formula; the evidence that you give is public and it will be printed, published and distributed to our members. Even if you want anything to be confidential, that will also be printed and distributed to our members. We have visited your institute and seen all the sections. What are your views about this Bill? Let us have a brief resume. Then members will put questions.

Dr. A. Joga Rao: I may be permitted to mention a little about my background prior to my joining as Controller-General in the department. That was about 3½ years ago. Prior to that I had about 25 years of experience, as a scientific research worker, relating to both pure and applied sciences in the Government departments and in the CSIR. I was also for sometime in charge of the Central Salt and Marine Chemicals Research Institute and the Central Electro-Chemical Research Institute, under the CSIR. I had some acquaintance with work in the Defence Metallurgical Research Laboratory and one or two private sector laboratories, so that I have a little background about the importance of research and what exactly is meant by technical know-how with respect to particular industries, and what generally are the problems which we as research workers, and also as those responsible for the development of industries on an industrial scale, are up against. I may be permitted to introduce Mr. Pai, who is the Joint Controller of Patents and Designs; he holds a degree in Engineering from the Banaras Hindu University. Incidentally I also hold a doctorate of science from the Banaras Hindu University.

As far as the present Patents Bill is concerned, I have studied it not only from the point of view of the Act as

it exists in our country but also comparative legislations which are currently on the anvil or which have recently been passed, as in Canada and in Ireland, and also the manner in which the socialist countries of the Soviet bloc are trying to develop their industries, because all that has a bearing on this problem. The main purpose of patents, of course, is that it should help invention and the development and establishment of industries by way of giving incentives and so on. It is almost an axiomatic thing and it is more or less accepted by the developed countries that the original purpose for which the patent grants used to be made is no longer very much there and the reason has been beautifully summarised in just one or two paragraphs in the Melman's Report. I shall read out those paragraphs just now.

At the same time, the developed countries are still very actively thinking and very actively involving themselves in the ramifications and in making the clauses more and more sophisticated as far as the patents laws are concerned. For the consideration of grants of patents, one had to locate or identify the inventor; that was so back in the years probably a century ago when you had to locate the inventor because it was the individual initiative that counted.

That position has completely changed now if the researches in the modern times which are to be applied on a large-scale are to be considered. If you permit me, I may just read out one or two sentences . . .

Mr. Chairman: Now it has passed on to the hands of the manufacturers.

Dr. A. Joga Rao: Yes. The fundamental purpose for which these incentives are to be provided to the individual inventor for doing his best, is not so much served because it is really difficult in modern times of industrial development to really identify who is the inventor. It is a big problem, Co-operation, Collabora-

tion, team-work and that kind of things are necessary now. In view of these things, it has assumed a different significance. Therefore, broadly speaking, the inventor nowadays may be regarded as the concern which is financing the research. So the definition of inventor which is required in some of these laws has to be carefully studied in the light of this.

Now I may read a few sentences from the foreword to Melman's Report, 1958. "The industrial and technological economy of today bears little resemblance to that of yesterday . . . The garret, garage, or basement inventor to a marked extent has given way to the laboratory technician who is both scientifically trained and versed in the latest techniques of experimentation and invention. The independent 'lone wolf' inventor"—Prof. Sir C. V. Raman used to put it as the 'lone furrow'; that is all right for fundamental research because it comes from intuition, but here it is a lot of development work—"has given way to the co-ordinated group activity of the research laboratory. What do these changes augur for the patent system? How shall the patent system respond the better to discharge its constitutional purposes? Professor Melman addresses himself to these issues . . .". I shall read the next important part—Prof. Melman is an Industrial Engineer himself of long standing of the Columbia University—" . . . The historical justification of a patent system is rooted in two propositions; first, that it is possible to identify the creators of new articles and techniques; second, that the privilege of exclusive property rights granted for a given period will yield a material return to the creators of new things . . .". Two problems are at the centre of this study. What are the conditions under which technical knowledge is produced? The answer to this question should indicate whether it is indeed possible to identify inventors and inventions in a workable way. This problem is surely of more than formal interest, for the course of recent patent litigation has

indicated that the criteria for invention—often tied in with the identification of the inventor—lie at the heart of many cases in which patents granted by the United States Patents Office have been held invalid by the courts". He has given figures. "Of 50 inventions held invalid by the U.S. Court of Appeals, 43 were invalidated on grounds of "lack of invention or anticipation". The second problem of the enquiry was: "what has been the effect of the patent system on the promotion of science and useful arts. This question is a critical criterion for the evaluation of the function of the patent system. Clearly, it is possible to suggest many criteria by which to evaluate an institution like the patent system". Now what he goes on to say is, undoubtedly the system of patents may be necessary and is necessary for the establishment of industries, for the development of industries by so many other ways but not necessarily by providing incentive to "inventors". This is how he puts it: "Patent arrangements have far reaching effects on economic institutions, on property relations, on profits of industrial firms, on concentration of control in industry, on monopolistic practices (anti-trust policy), on the role of Government as a decision-maker in industry, and on the scope and characteristics of the legal profession. Any one of these areas of effects could be utilised for the purpose of evaluating the functioning of the patent system." In other words, he does not dismiss the patent system as worthless. It is very useful from those points and for those purposes. But the fundamental point and the basic idea with which the patent system originally came into existence is not served. That is, granting of patent will enable more inventions to flow out from the individual inventor. It need not. It can flow, of course, from a team-work; for that purpose of course, the patent system is very necessary. And for enabling foreign investment and other things also, the patent will serve as a very good means for negotiations and other things. That is the value of the patent system and it is for these reasons

that the Judge, considering all the aspects, had decided that we must have the patent law. Of course, each country of the world is constantly revising its patent laws to suit the current circumstances and the current needs. There is nothing wrong in it. Now, our Patents Bill, as far as I have seen, therefore, serves that purpose in the present context of circumstances and probably at any time afterwards, changes will have to be brought about and may be brought about even after the Bill is passed into law, just as various other countries are doing.

Again, this team-work is very important in foreign countries. It has not yet developed in our country. Still here we have to look for an occasional individual incentive and so on. How best this can be done may be a fairly important question in the present level of the development of the country. For this kind of thing in the USSR, what they have established is an Inventor Certificate. The United Nations, the Paris Convention and all the important international agencies and various other developed countries have also recognised these Inventor Certificates as at a par and equivalent to the patents, and that is how the USSR became member of the Paris Convention.

Mr. Chairman: What is actually an Inventor Certificate. Can you give us an idea?

Dr. A. Joga Rao: An Inventor Certificate often arises from the effort of a single individual inventor by reason of his own skill. The right of inventor certificate automatically vests in the State in return for some consideration and recognition which the State accords to the inventor. He himself cannot exploit it in any way he likes, viz., by establishing industry and all that. The Soviet citizen can still have it exploited provided it is approved and for approving it they send it to their workshop and when favourable report from the workshop comes, then it can be used. But he

has no rights at all. If he wants the right of exploitation, he has to apply for patents and he is free to take a patent. The only difference is that in the case of Inventor Certificate, the charges that are paid are absolutely negligible or 'Nil' for the grant of the Inventor Certificate. But for the grant of patent the charges are exorbitant.

Mr. Chairman: What is the use of the Inventor or Authorship Certificate to the inventor?

Dr. A. Joga Rao: The use is like this. He gets monetary reward from the State, he gets a roll of honour, he gets credit and recognition for it. Another aspect in which also we may have some kind of similarity is the smaller inventions which are more possible in our country because of various reasons. (It is very difficult to have more sophisticated inventions here). For these small inventions in the USSR, they give rationalisation proposals. They are legally recognised, and they are less than the Inventor Certificate in their worth and magnitude. Possibly that kind of thing might be useful in some of the developing countries. Then as far as the Patent Office is concerned, any details of course of a procedural nature or factual data, Mr. Pai will be able to give. He is directly in charge of the Patent Office. In my capacity as C.G., I am in charge of both the Trade Mark Registry and its branches and the Patent Office; the various offices are day to day administered by the Joint Controller and the Joint Registrar.

I have noted down a few important points relating to the clauses, a few which might involve procedural matters, a few which might involve administrative complexities in the administration of these particular provisions when the Act is brought into force and a few others which are of policy nature, in which I have nothing to say as that is Government policy, and a few, of course, are verbal changes here and there of a drafting

nature or typographical nature. These I have noted and I shall submit these.

Mr. Chairman: If you could give any suggestions regarding how we can improve the Bill. That also you may give.

Dr. C. B. Singh: Mr. Joga Rao said just now he has got certain suggestions. Will it be possible to give them to the Members of the Committee. It will be helpful.

Dr. A. Joga Rao: I have no suggestions. Some provisions which are of a procedural nature . . .

Dr. C. B. Singh: Whatever it is.

Mr. Chairman: I have you got anything more to say.

Dr. A. Joga Rao: No, Sir.

Shri Bibhuti Mishra: What is the total number of patents and out of these how many patents are Indian, how many in collaboration and how many foreigners?

Dr. A. Joga Rao: The total number of patents so far granted is about 67,000. Out of these, roughly 10 per cent are Indians and between 97 or 88 to 91 per cent are foreigners. This ratio has remained practically the same throughout the First Plan period, Second Plan period and the Third Plan period.

Shri Koshi Ram Gupta: Is this the total for drugs? He wants for drugs.

Dr. A. Joga Rao: I have got the data from 1912 to 1965. The total number of patents so far granted is 75,000. Of these 7,700 and odd are Indian and about 67,000 foreigners, i.e., a ratio of 1 : 9.

From 1912 to 1965 this is the ratio.

Now, patents granted for drugs and medicines: Indian—386 and foreign 8,000. The ratio is 1:20. This is an interesting fact. While the Indian inventive skill or Indian investment in

other industries is fairly good, in pharmaceutical industry it is not upto that mark.

But I must mention that a similar ratio generally does prevail in all the countries with the exception of West Germany, Japan and USA. That is for the simple reason that soon after the invention, the inventor applies to 70 or 80 countries and takes patents there. Sometimes he applies for patent even for an invention which he knows is useless and which he is not going to exploit. Why? Because he does not want others to tread on his toes.

Then, patents other than for drugs:
The total number of patents in force as on January 1966 is 31,000. Out of these 31,000 the ratio of Indian to foreign is: 1:11. Out of this the ratio in respect of drugs and medicines is 1:30.

Shri K. V. Venkatachalam: You can give the absolute figures and that statement you can circulate.

Shri Bibhuti Mishra: To what extent these foreigners have been helpful to make Indians now know the know-how and develop Indian industry regarding drugs and other things?

Dr. A. Joga Rao: It is a very important point. There are three or four ways in which they can help. One, they can set up full-fledged research institutions in the country. They have not done it except that CIBA have set up an excellent research laboratory for pharmaceutical and drug research near Bombay.

Dr. C. B. Singh: Pfizer has done in Chandigarh.

Dr. Joga Rao: That is only for production. They are anxious to set up factories to produce. Sandoz and Glaxo have done it.

Secondly, they can enter into collaboration agreements for starting

factories where Indians and foreigners have some kind of participation. The Punjab Government have given to the Pfizer's some facilities for this in the form of land, water, local amenities etc. They are running it in Chandigarh. When I look at some of the factories what impresses me is that our own young men are fully manning these institutions. They are in complete charge. They are really the masters of the show as far as production aspects are concerned.

Shri Bibhuti Mishra: We have visited this in Chandigarh. They are doing it with selfish motive because our boys can only manage other's factories.

Dr. A. Joga Rao: I am not denying it. But incidentally, at least as a by-product, our people do learn and get some kind of acquaintance with the job.

The third kind of help they can do is to give some kind of grant to some of the research establishments here or invite some of these people to foreign countries for giving them training. But this is very insignificant.

Shri Bibhuti Mishra: Is it not a fact that Pfizer's perior has expired and still they are doing it?

Dr. A. Joga Rao: Yes.

Shri Bibhuti Mishra: How far this Patents Bill is helpful to develop our industry?

Dr. A. Joga Rao: It is helpful because it gives large powers to the Government while it does not deny patents. It enables others just to walk into the country for the purpose of securing patents. Having secured patents and having divulged their specifications, at any stage, it is possible for the Government to control some of these factories which they set up, on payment or without payment.

Dr. C. B. Singh: We are not trying to do that.

Shri Bibhuti Mishra: In Ayurveda they do not get their medicines patented. They have got a formula for Chyavanaprash, Yogaraj, etc. and anybody can see that formula and manufacture these medicines in their own way. But this patent here is a sort of monopoly. How is it? It is because of the materialistic view of people.

Dr. A. Joga Rao: I am not very competent to say on Ayurveda. What they do in Ayurveda is like this. There are books like Chintamani and Sarangadhara Samhita etc. They contained most of these yogas. In those days even the wives in a family used to prepare medicines. My grandfather used to prepare medicines and his brothers also prepared them. If they could not get Amalaka for a particular medicine, they had recourse to substitute because it is prescribed somewhere else or they thought it was useful. For instance, Sataputha Abhraka used to be prepared using cow-dung cakes as fuel. But modern people may use electric furnace for the same, rightly or wrongly. Now in the case of modern industry also, for instance, if a more competent scientist were to take up to the application of the modern technology, to the implementation of the requirements as given in these books, it is possible because by appropriate regulation of electrical controls the temperature can still be regulated and can be controlled. There are some who try to go in for substitution. Now, in the matter of patents the specifications, of course, are laid bare. anybody can get a copy of it easily for one rupee or two rupees or five rupees in any country. There is no control. But the question here is having got a patent specification, in what industries is it possible, and for what type of countries to straight-away set up production, which they can do, of course, in case they have no patent law, and in what kind of industries and in what kind of set-up of a country can it not be done, even if all the specifications are laid before them? I tell you, for example,

in the case of metallurgical industries, it is possible for our country to do it provided the law does not come in the way. Alloys etc. have been grouped for two reasons. One, these we can produce based on the specifications or slight variation in the process. The other kind of things are more sophisticated. Even if the patent specifications are laid bare for us, it would not be possible, and therefore for these things we do not want to give any kind of patent rights for the products. There is nothing strange in this. Many of the foreign and developed countries have also similar exceptions and this is nothing unusual. It is decided by the Government in, what they call, public interest. What public interest is and how it is to be estimated are very complex matters.

Mr. Chairman: Which are the foreign countries?

Dr. A. Joga Rao: Germany, Neithers, Austria. These are there in the statement which was originally submitted to the committee. If necessary, we can submit a complete list.

Shri Bibhuti Mishra: Practically the period for patents is from 8 to 10 years. One gentleman said that it should be seven years. What is your opinion?

Dr. A. Joga Rao: The period was 14 years in India in 1930 and before. It is only in 1930 or after that it became 16 years. But then we had a different set-up and a regime. Possibly each Government looks on these in different ways and they bring out regulations, such changes, as they think necessary in the contemporary state of affairs. So 16 years is now being brought back to 14 years. I do not think it is unreasonable, though a matter of fact, there is a general trend in international circles to push it up to 20 years. Many countries which had lower periods in the past have now begun to replace it.

Shri Bibhuti Mishra: Do you think that even after granting patents,

Government should have some control over the patentee to control the price so that the patentee may not monopolize the industry and may not take too much advantage from the consumers?

Dr. A. Joga Rao: Government control is absolutely necessary in the public interest, because under the law they are conferring a grant to the patentee. In some European countries' laws they express it as an authority which is given to him to preclude others.

Mr. Chairman: Could you give us a draft to be included in this Bill regarding price control?

Dr. A. Joga Rao: I am sorry I cannot. How can I?

Mr. Chairman: Just as control must be there. Price control should be there by the Government.

Dr. A. Joga Rao: Government will always look to the public interest. It may be in the public interest to supply the goods at the cheapest possible price even by importing it to stave off a situation. That may be public interest in certain countries, whereas in certain other countries we cannot cite this point of cheapest price from whatever competitor as public interest because that way it may be said, they cannot lay the industrial base, they cannot gain self-sufficiency. And therefore if that be the idea the manner in which they serve public interest will have to be different. So it is a question of expediency in the public interest.

Shri Bibhuti Mishra: Are you in favour of putting some clause in this very Bill to control prices of the patents?

Dr. A. Joga Rao: Control of the price is, to a certain extent, in the existing Act. It is not there in the Bill.

Shri Kashi Ram: The witnesses that have come forward uptill now

can be divided into so many different categories. There were some who advocated total abrogation; others who advocated 7 years from the date of application; others 7 years from the date of sealing; others 10 years from the date of specification and some others for 10 years from the date of sealing of the patent, while the foreigners mostly have advocated for the period of 16 years as it was in the former Act. You must have analysed and studied all these points of view. May I know in what background these people have been demanding, different periods?

Mr. Chairman: For their own reasons they have been demanding different periods.

Dr. A. Joga Rao: According to me—this is reasonable as also legally a correct thing because the wording is there—the date of filing of the complete specification would be better for counting the starting of the term of the patent. Of course, it is quite possible for the statute to specify that the term shall commence only from such and such date, but there are one or two anomalies. Once a patent application is filed—I am now referring to the complete specification—the applicant secures certain limited rights, certain amenities and certain protection. If, therefore, it is included for the counting of the term of the patent, I don't think it will be fair and proper. If it is to be counted from the date of sealing of the patent, I think it may lead to anomalous situations. The sealing date may be anything and it will be difficult for the public to know that, the date of the patent and all that. Another notification has to be issued for this purpose. My personal view is that the clause as stated in the Bill is perfectly in order.

Shri Kashi Ram Gupta: I want to know what has prompted these people to plead for different periods. For instance, I may give the example of foreigners demanding for 16 years. What can be the background of this? Have you studied it or not?

Dr. A. Joga Rao: As far as I have tried to understand it, the background is that the foreigners have a vital interest in a strong patent law in the developing countries and India is more or less regarded as a leader of developing countries. If the patent law in our country is weak, then the Southeast Asian or other countries will emulate and follow that. If it is strong here, that it should be 16 years or 20 years from the date of sealing and not from the date of filing the application, it is good for them. I have tried also to analyse the pharmaceutical opinion from the evidence we have received from them. It is not unanimous. There is a clear cleavage into two groups. A certain group of pharmaceutical concerns want us to further weaken this law; there is another group which wants us to strengthen it further, if possible. I have tried to analyse the reasons why this group is feeling like this and the other just in the opposite manner.

Dr. C. B. Singh: We would like you to tell us your analysis.

Mr. Chairman: He has given the reasons also.

Shri Kashi Ram Gupta: Now I come to another point. The former Act had a provision for timelimit for sealing. But the present Bill does not have it. You are of the opinion that the period should be from the date of specification. Are you sure that there should be a clause by which the time-limit should be fixed for the final date of sealing.

Dr. A. Joga Rao: The final date for the sealing is there in the present Bill; it is from the date of acceptance.

Shri Kashi Ram Gupta: It is not there.

Dr. A. Joga Rao: For acceptance, 15 months is the period from the date of first Examination Report.

Shri R. V. Pai: The time-limit is specified with reference to the date of

acceptance and not from the date of application or date of complete specification. In the existing Act the maximum time-limit of 24 months is prescribed with reference to the date of application.

Shri Kashi Ram Gupta: The former Act provides a time-limit in which it should be sealed.

Mr. Chairman: It gave 2 years; the present Act has nothing.

Shri Kashi Ram Gupta: The present Bill does not have it. The former Act had it. What is your opinion about the time-limit for sealing?

Dr. A. Joga Rao: The time-limit for sealing may be there, but it will not be possible to any patent office to implement it, if it is universal search system. That is the system of search of world-wide novelty of an invention according to which the patent has to be examined even at the first stage and then only the patent will be proceeded with. This examination is a very difficult and complicated thing and the time-limits for sealing will be very impractical. The Statute did not provide in so many words the examination of novelty, with reference to India or with reference to any other countries and also whether it is in reference to the patent existing or non-existing. It is implied by the whole Act. When a patent is accepted, the fundamental element required is inventive ingenuity and the examiners have to determine this. The law did not state in so many words. In the present bill it is stated that the examiners shall examine as far as novelty goes; the Controller may direct the examiner to refer to such and such things for determining the question of novelty. It has to be verified whether anywhere in the world it is published in written documents or whether even otherwise it is there.

Shri Kashi Ram Gupta: In your opinion this new clause of novelty search is very necessary.

Dr. A. Joga Rao: The law of universal novelty as opposed to local novelty is of a highly important nature and most valuable. The Government guarantees the patent as far as novelty and all the things are concerned. In West Germany they have universal novelty and along with that the guarantee is also there. In our country we have accepted that part of the process, but the Government does not give guarantee. But all the same once we do the worldwide novelty search at the examination stage, the value of patent is enormously enhanced. To the extent I have studied this problem, in this process of worldwide novelty, things get bogged down and there are delays of 3 to 5 years even, for acceptance. Unless the novelty is determined, neither it is accepted nor refused. It is estimated that one million applications will be the back-log by 1980 in the U.S.A., they give the figures of back-log for the year 1970 and also 1980. Therefore, the general trend has been more or less to step down from the universal novelty to local novelty or to mere registration of patents. That will not give any value to the patent, though it may have financial or other usefulness. The trend of thinking seems to be that the Government is allowing patents to be granted and if it is a wrong patent it will go into the dust-bin and if it is a worthwhile patent, somebody will exploit it. We in the examination stage cannot undertake this stupendous amount of work which may lead to 5 years back-log. Another alternative is to introduce mechanised searching system, mechanised computerise system, just as is done for administrative studies, even for novelty search, limiting for the time being to certain categories. This of course is a helpful thing, but it is a costly thing. Japan has started this recently as an experimental measure in 4, 5 categories.

On novelty examination—just like a computerised system—this is also being done. I think that in Sweden, they have got an equipment for that. They have been making experiments on that. Experiments

have been started in one or two countries.

Some countries have introduced what is known as "deferred examination system". Under this system, a patent need not be examined as and when it is filed. It is only after five years that they will take it up for examination. During these five years, unless any other party evinces any interest, they don't examine. So, less examination work devolves upon the Patent Office. They are already overburdened with their work. What is known as "common searching system" is prevalent in the Scandinavian countries where they receive scores of applications. E. C. M. countries have similar conventions. Swiss have their own conventions. They also receive scores of applications. Their Patent Laws' aim is that they can pool their resources so that the examination work can be shared more or less by all. If one country examines a certain thing, others can accept their findings more or less. The International Patent Institute at the Hague undertakes examination on novelty on payment under the Paris Convention. The general trend in all these things is to give this up more or less. As a matter of fact, in Netherlands, they have given this up; West Germany is also going to give up the 'universal novelty examination.'

Shri Kashi Ram Gupta: May I know whether the period for acceptance includes the period for novelty examination as well?

Dr. A. Joga Rao: Yes, Sir.

Shri Kashi Ram Gupta: Fifteen months are there within which the examination should be completed.

Dr. A. Joga Rao: Yes, Sir. From the date of completion of specification it should be completed.

Shri Kashi Ram Gupta: Just now you have said that if we put the period for the date of selling, it may

not be possible to complete the examination. How much time does this take?

Dr. A. Joga Rao: I am sorry there is a mistake in what I said. With Chairman's permission let me correct that. The period is 15 months from the date of the examination report from the Patents Office and not from the date of completion of specification.

Shri Kashi Ram Gupta: What is the time taken for the date of sealing?

Dr. A. Joga Rao: That time can be indefinite. Because of the world-wide novelty, it has to be left like that.

Shri Kashi Ram Gupta: The time is indefinite; we don't guarantee the period for the date of sealing. From the date of specification, it may take years together till final sealing is done. We have got ten years period from the date of completion of specification. That means the period is practically over.

Dr. A. Joga Rao: My submission on this is that in any case even if the time is statutorily fixed as 16 years, for a compulsory licence for example being granted to a party, there are so many other factors under which the compulsory licence is really issued to the party. The party may not be able to accept the case. Suppose there is a patentee. He goes on dragging his case for eight or ten years out of the 16 years statutory period. And ultimately, he wins his case. There will be only five or six years left. There are other causes and considerations also which reduce the effective term that a patentee may enjoy. We do not expect that this universal novelty will take inordinate time; we need not fix a time-limit.

Shri Kashi Ram Gupta: The model law has provided a clause for the

period to begin from the date of sealing. If we begin the period from the date of sealing—whatever may be the period—then, the argument of the patentee will not be real that the period has been covered by litigation etc. There should be one way of safeguarding this interest. Are you in agreement with that?

Dr. A. Joga Rao: I was present at the deliberations, when the Model Law was discussed, as a Member from India. The Model Law was completely directed to helping such developing countries as are very much less developed than our country. It is not intended for a country like India which has a well-developed Patent system and which has a beautiful Statute and all the best experience, I believe, there are many other developing countries in the world. In Africa, for instance, a number of States have gained independence. Similarly, some States in other parts of the world, have just gained their nationhood. They do not have any such law. The model law is designed to improve their present stage of development.

Shri Kashi Ram Gupta: You have given an example that in Russia there is an inventor's certificate. Is there a group system also in Russia as is present in other countries?

Dr. A. Joga Rao: In the U.S.S.R., an inventor's certificate shall be granted only to an individual inventor. It is never granted to any group of persons.

Shri Kashi Ram Gupta: Whether the group system of research is there?

Dr. A. Joga Rao: Yes, Sir. There is some group system. The inventor's certificate is only to encourage the precocious persons who have rendered some account of themselves.

There are also what are known as rationalisation proposals which are of a lower order than the inventor's

certificate. In the U.S.S.R., they give some kind of credit to these things.

Shri Kashi Ram Gupta: In what way the present policy will accelerate basic research on medicines in our country?

Dr. A. Joga Rao: As I mentioned by way of general observations, no Patents Law either in this country or in any country can help in the making of inventions though it may help in the development of industry.

Shri Kashi Ram Gupta: My point is this that the group research is the main-stay of the industries these days. We have also to follow the group system in our country. In what way the Patent Law or Bill as it is can help us in the research?

Mr. Chairman: It can only help in formulations and developments of industries on basic research.

Dr. A. Joga Rao: It can help in one way. A big financier or a number of financiers can gather together and establish a good research centre and as any of the private foreign concerns are doing, patents can be taken of course in the name of that concern.

Shri Kashi Ram Gupta: My point is different. All the foreign concerns have an argument with them that they can establish research institutes on their own here provided a longer period is given. While the other's point of view is that we must have our own institute in India. It may be a subsidised institute even which may be do research work. We do not need any foreign research if the period of patent is to be increased. These are my points.

Dr. A. Joga Rao: The question is as to in what sector the research organisation will function better. This cannot be answered by me though I have some experience of it. Dr. Govindachari of the CIBA, the other

day, did point out when this question was put to him. It seemed to him somehow that—he originally belonged to the Madras University Laboratory—certain conditions prevail there where he is working. That enabled not only him but many of the younger men also to undertake research in a cooperative way with a team-spirit. Team spirit is not so easy to obtain.

Shri Kashi Ram Gupta: The main point was this. Research is a main-stay for the drug industry. Which pattern is fit for our country he cannot very definitely say. That is my point.

Mr. Chairman: He has said enough on this.

Shri Kashi Ram Gupta: We would like to know as to whether research has anything to do with the period of the patent?

Dr. A. Joga Rao: I don't think it has.

Shri Kashi Ram Gupta: We have here in India at present some Institutes. Are you of the opinion that in future the research institutes shall have to be of the size as is prevalent in other countries or we need not copy other countries?

Dr. A. Joga Rao: We have already copied other countries in the matter of our Research institutes and as far as the equipment and laboratory facilities are concerned.

Shri Kashi Ram Gupta: Magnitude also?

Dr. A. Joga Rao: Yes, magnitude also. I can say that every Indian can really be proud of these National Laboratories from the point of view of equipment and other laboratory services, materials and especially working-space, for which they are very hard-pressed in those countries.

Dr. C. B. Singh: You are a graduate of Metallurgy from Banaras?

Dr. A. Joga Rao: I am a pure Electro-Chemistry M.Sc., not Metallurgy though I had occasion to study it.

Dr. C. B. Singh: Supposing your process or whatever processes you employ was patented by you, for what period for which you would like to have the benefit of it?

Dr. A. Joga Rao: In that particular patent I never thought of it.

Dr. C. B. Singh: You are so unfortunate—that I know. Have you become wiser? But we have got to think about the young men who are working. Supposing it was patented by you, what would you like to be the royalty or the period for the patent?

Dr. A. Joga Rao: Even if it was patented and even if the period was 20 years, in that particular instance I would not have benefited much because the lion's share would have gone to the organization of which I was an employee and for doing the research I was paid the salary.

Mr. Chairman: He is giving evidence here as Controller-General of Patents & Designs and not as an individual.

Dr. C. B. Singh: I am asking from an entirely scientific point of view. He made a great invention. If he made that invention on his own as many others have done, what would have been the period for the patent? Now for what period he would like the patent to be given to him?

Dr. A. Joga Rao: In the case of pharmaceutical patents, I believe it is not worthwhile to give a longer period even from the patentee's point of view. In the case of non-pharmaceutical industries like heavy

industries I think it is worthwhile to give a longer period.

Dr. C. B. Singh: You said that in the case of pharmaceuticals it is not worthwhile. On what grounds you are basing this?

Dr. A. Joga Rao: The grounds are mostly those that I find in the rapid manner in which any drug, whether it is sulphadiazine or whether it is anti-biotic, is more or less superseded faster by a further development and the further development is generally found to be better.

Dr. C. B. Singh: Here I have got an appendix—a statement. What time does it take for a firm to bring the product into the market after it has been sealed in the Patent Office?

Dr. A. Joga Rao: I am sorry—how can I say that?

Dr. C. B. Singh: Please see the comparative statement there.

Dr. A. Joga Rao: In USA it is stated that it takes one year; in India it is 9 years. The ratio is more or less like that.

Dr. C. B. Singh: It takes round about 8-9 years to bring the product in India to the market—majority of them like that. You said that you will not like them to be given a longer period.

Dr. A. Joga Rao: Once a patent is granted and once they have worked the technical know-how and set up the base—they can almost remove a chunk of land from Switzerland and set up a base here—if they are permitted, they will be able to put the product in the market within 2 years at the maximum though they are not able to do it now. Why they are taking 6 or 7 years—for that one has to look for reasons elsewhere.

Dr. C. B. Singh: What are the reasons elsewhere?

Dr. A. Joga Rao: That I cannot say because I do not know what are the reasons.

Dr. C. B. Singh: Without knowing them how do you say that the reasons are somewhere else.

Dr. A. Joga Rao: Elsewhere in the sense—in the necessity for permits, in the necessity for securing foreign exchange and in the necessity for having available the necessary land and other services nearby and also the technical base with which to start.

Dr. C. B. Singh: That is not connected with the Patents Bill.

After all you fix the period on a certain basis. It is not an arbitrary figure. That figure has got to be based on certain basic factors which go into operation.

Dr. A. Joga Rao: In this case some of these listed pharmaceutical products are anti-biotics. The question depends again on what particular product he wants to take the patent. If it is a completely new drug for the first time discovered and if it is to be put into the market, I doubt very much whether anybody would make any headway.

Dr. C. B. Singh: When we think about patent it is always a new drug. Patent means a new drug and a novelty something very new. We are talking about that novelty only. We are not talking about something which is produced somewhere else.

Dr. A. Joga Rao: These figures relate to the present position as up-till now. The question of novelty and worldwide novelty is involved when this Bill comes into force. Till now it is not necessary whether it is a new drug as far as the world is concerned. Only it is novel as far as India is concerned for the purpose of patentability.

Dr. C. B. Singh: In C187 there is a provision for licence of right.

Have you any idea as to how many countries in the world have got this provision?

Dr. A. Joga Rao: This is an automatic endorsement—deemed to be automatic endorsement of licence of right. I don't think in that form it is there in any other country.

Dr. C. B. Singh: No country has got it—there I agree with you. Can you give any reason why we should have it here? You have come as an expert from the Government side. That is why I want you to tell us as to what are the reasons.

Dr. A. Joga Rao: My reasons are of course the Gov't views.

Mr. Chairman: That question we may better put to the Minister.

Shri P. C. Borooah: One of the important objects of the Bill is to provide incentives for inventions and also for development, and it is guided by two things: one is the time factor and the other is royalty. Some of us feel that this time factor is a bit too much. Suppose we cut down the time-limit and increase the rate of royalty. Will that serve the purpose of giving incentives? Or let there be less of royalty and increased time-limit. Which one would you prefer?

Dr. A. Joga Rao: It cannot be said which will be better uniformity or universally in respect of all kinds of inventions. But in the field of pharmaceuticals, food, drug or chemicals and alloys, where process patents are allowed and not product patents. I think it may be better to give a higher royalty; I am not suggesting that, but of the two, if one were to be selected, it would be better to give a higher royalty rather than increase the term for the simple reason that even if you increase the term, the manner in which the process is actually operated can become known fairly soon and by

slight variations in the process, it is possible for others more or less to copy that. Therefore, a patentee would prefer an increase in royalty rather than an increase in the term. That is what I feel in certain kinds of industries. It may be different in the case of other types of inventions.

Shri Kashi Ram Gupta: I am not able to understand his reply. Royalty is charged when there is compulsory licence and licence of right. Otherwise a patentee has no right to charge royalty. Royalty cannot be charged in all cases. Therefore, the period has nothing to do with the rate of royalty. There is no co-ordination between the two.

Shri R. P. Sinha: It has been said by many witnesses who have come before us—I am only talking about the Patent Office and patent procedures—that the whole process of granting a patent has been made so elaborate and cumbersome in this Bill that it will be very difficult for the applicants to furnish all the information. One or two instances were given that they have got to give all the information in different languages which the patent office will not be able to make use of unless they have a very elaborate system of translation. Then they have got to keep the patent office furnished within a certain prescribed time with all the suits that may be going on in other countries. Therefore, they say that the procedure should be more easy not only from the point of view of the applicants, but also from the point of view of the Patent Office itself. It has been represented to us that if the whole procedure is to be implemented, the Patent Office has to be expanded vastly. We have not got the resources—technical resources, not financial resources—to fully carry out the intentions of the Bill. Now what has the Patent Controller to say about this?

Dr. A. Joga Rao: I do agree that it is very necessary to gratefully fortify the Patent Office both in the matter of strength, that is numbers, as well as quality, that is at higher supervisory levels. Besides, extensive facilities will have to be given and sufficient finance provided in order to implement the various provisions. Some of the clauses which are of particular relevance to these administrative aspects of implementing the various provisions, I have got here, but it will take some time. I have also listed some of the matters where procedural changes in the provisions may be considered by the Committee without loss of any time to anybody, which will probably facilitate the work of the Patent Office well as the patent applicants . . .

Mr. Chairman: When we visited Calcutta, after we visited the Institute, I had a discussion with the Director-General and a note was distributed. I have also written to the Minister and the Minister, Mr. Sanjivayya has replied saying that he will consider those suggestions and take steps.

Shri R. P. Sinha: Now I would like to refer to the financial memorandum that has been drawn up in this Bill. Is that memorandum adequate, financially speaking, to fortify the Patent Office to the extent that is needed?

Mr. Chairman: That we will discuss with the Minister when he comes here.

Shri R. P. Sinha: What I feel is that the financial memorandum that has been given along with this Bill is not very adequate . . .

Mr. Chairman: Let us discuss it. After all he is an official. Let us discuss it with the Minister.

Shri R. P. Sinha: We must have figures. This figure which is given to us is too little to carry the entire Bill

into effect. He must get what is the amount involved in the matter of expenditure.

Mr. Chairman: Can you give it?

Dr. A. Joga Rao: I was trying to put it this way. Rupees four lakhs as the recurring expenditure which, I think, we have mentioned in the financial memorandum, excluding a small sum—probably Rs. 20,000—for the non-recurring expenditure. But this provision relates to the financial requirements during the first year or so when the Bill actually is passed into Act and brought into force. The work has to develop and it has to develop in stages. So depending on the phase-wise or stage-wise development of the work, you will have to gradually enhance the financial provisions. I agree that the provision made here would appear to be rather small, but I submit that this would suffice during the first year or two. This would certainly need further strengthening afterwards and this could possibly be taken care of by the increased revenue that the Patent Office may get or may not be taken care of, because as the Judge mentioned in his report, this system of granting patents is to be regarded not as a revenue earning service but as a public utility service, and, therefore, about the financial aspect we need not very much think what it is going to be in the years to come. In the first one or two, probably that would suffice. Later it may have to be increased.

Shri B. K. Das: Then there are some provisions regarding appeal against the decisions of the Controller. Have you any comment on that?

Dr. A. Joga Rao: There are quite a number of appeal provisions. In fact the strong objection which most of the Memorandists from abroad have taken is on the basis of some kind of dictatorial powers which either the

Controller or the Government have kept to themselves in some of these important clauses. Some of them, the Committee must have noted, have stated that the appeal provisions more or less are like an appeal from Caesar's decision to Caesar. That is what they have expressed, but with the experience and whatever knowledge I have of the working of these appeals which have gone to the Central Government. I have every confidence that the Central Government, whatever is the decision that they give, are not in the least worried as to whether it is going to be against or in favour of the earlier decision of the Controller. The past experience too is, it has never been uniformly O. Kaying the earlier decisions, thereby annulling more or less in effect the appeal provisions which existed. It has not been so. The Central Government would be more expeditious and it does not do any injustice to any party. The thing is it is expeditious and as against that I am aware of the elaborate time even in the trade mark cases that is taken when the parties go in appeal to the Bombay High Court or to any other High Court. The Trade Mark Agents' fees in many cases are very very high—three figure fees are charged. Considering these high figures, an appeal directly made to the Central Government would be much simpler. Then the High Court proceedings even in Trade Mark cases have been dragging on at least for 6 to 8 years in quite a number of cases. There is hardly a case which has been finished by the High Court in 3 years.

Shri B. K. Das: If there are Special Appeal Tribunals?

Dr. A. Joga Rao: As regards the Special Appeal Tribunal, I think it can be considered, but it should be open—of course as it is the Bill does make a provision for having a notification—to take advantage of the technical knowledge in any case.

The decision by the Central Government must necessarily have to be based on the technical content of the patent specifications no less than the legal aspects. As far as the technical content is concerned, the Central Government will normally have to either secure it from any one of the technical experts who are at the same time in the service of the Government, or alternatively they can secure it from independent technical experts. Now it would reassure the parties and instil greater confidence if this kind of technical opinion is openly sought and made use of by the Central Government from any outside expert.

Shri B. K. Das: You mean there is no obligation for seeking that opinion openly. But the Government must seek that opinion openly. In that case the Tribunal, may create greater confidence in the appellants.

Dr. A. Joga Rao: It will, because it is said: Justice should not only be done, but it should also appear to be done.

Shri R. P. Sinha: Will you kindly direct the Government to give us a correct Financial Memorandum, because as it is it is absolutely misleading.

Mr. Chairman: We will discuss that with the Minister. We are discussing the whole Bill with the Minister. You may raise this point.

Shri R. P. Sinha: The time will be short. If you write to them....

Mr. Chairman: We are sitting for 7 days.

Shri R. P. Sinha: If you write to them that Members are not satisfied, that would be better.

Mr. Chairman: Mr. Misra will please make a note of this.

Shri R. P. Sinha: You may say at the next meeting, we must be given a revised Memorandum.

Mr. Chairman: Mr. Misra may make a note. What is your suggestion for reducing the period for the date of sealing? You said 6 to 7 years. We want that period to be reduced. It should not take more than 2 years.

Dr. A. Joga Rao: That will depend on a number of factors. If there is no opposition.....

Mr. Chairman: Even if there is opposition.

Dr. A. Joga Rao: If there is opposition, normally the due process of law has to be gone through. Notices have to be issued. They will ask for time. That has to be served and they will be submitting affidavits....

Mr. Chairman: Can't that period be reduced?

Dr. A. Joga Rao: Statute can fix it that all procedures should be completed within the such and such period. They can say that submissions have to be made by either party once and not again. But that will be denying more or less one of the important rights which the contending party has. He will say I have not looked into the report or the affidavit which he has placed before me. I have seen it just now. For that I may be given time. How can you meet that objection?

Mr. Chairman: He can be given 15 to 20 days. Why should he take years? Just as they had fixed 2 years in the previous Bill....

Dr. A. Joga Rao: In the existing Bill, it is there.

Mr. Chairman: We can also fix a period like that. Are you in favour of that?

Dr. A. Joga Rao: If a period like that is to be fixed, under normal conditions, when there is no opposition, when there is no application

for extension of time at any stage, I believe that period can be fixed in relation to date of acceptance of the application or in relation to the date of the first examination report issued.

Mr. Chairman: All right. Thank you.

(The witnesses then withdrew)

(The Committee then adjourned)

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PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND CONDUCT OF
BUSINESS IN LOK SABHA (FIFTH EDITION) AND PRINTED BY THE GENERAL
MANAGER, GOVERNMENT OF INDIA PRESS, MINTO ROAD, NEW DELHI.
1966.
