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CHAPTER I.-INTRODUCTORY.
Para.
Page.

1. Terms of Reference ..... 1
2. The claim for protection ..... 2
3. Location of the factories ..... 3
4. The Board's procedure ..... 3
5. Acknowledgments ..... 4
6. Arrangement of the Report ..... 5
$\checkmark$ CHAPTER II.-PROCESS OF MANUFACTURE-HISTORY OF THE
7. Ply wood defined ..... 6
8. Uses of ply wood ..... 6
9. Timber ..... 7
10. Glues ..... 3
11. Process of manufacture ..... 8
12. The rotary lathe ..... 9
13. Clipping and drying ..... 9
14. Gluing and pressing ..... 9
15. Hot and cold process ..... 10
16. Tea chests ..... JO
17. Shook boxes ..... 11
18. Establishment of three-ply factories in India ..... 11
CHAPTER III. -SUITABILITY OF THE INDUSTRY FOR. PROTECTION.
19. Conditions laid down by the Fiscal Commission ..... 13
20. Protection not required for the manufacture of ply wood articles other than tea chests ..... 13
21. First condition: Supply of timber ..... 13
22. Suitable trees for veneering ..... 14
23. Hollock ..... 15
24. Hollong ..... 15
25. Simul ..... 16
26. Timber supply sufficient for Ply Wood industry ..... 17
27. Casein ..... 18
28. Fittings and linings ..... 19
29. Other conditions for protection ..... 19
30. Necessity of protection for tea chests ..... 20
31. Reasons for increased competition ..... 20
Para. Page.
32. Need of assistance to Indian industry ..... 20
33. Third condition of the Fiscal Commission ..... 21
34. Other grounds for assisting the industry ..... 22
35. Conclusion ..... 23
CHAPTER IV.-MEASURE OF PROTECTION.
36. Method of procedure ..... 24
37. Cost of replacement of plant ..... 24
38. Depreciation ..... 25
39. Working capital ..... 25
40. Head office charges, etc. ..... 26
41. Manufacturer's profit ..... 26
42. Works costs ..... 27
43. Decrease in future costs from increased production ..... 28
44. Specific economies: Timber ..... 28
45. Glue ..... 29
46. Fair selling price ..... 29
47. Fair selling price of chest $19^{\prime \prime} \times 19^{\prime \prime} \times 24^{\prime \prime}$ ..... 29
48. Import prices ..... 30
49. Adjustment on account of importer's profit ..... 30
50. Adjustment on account of landed freights ..... 31
E1. Import prices for the last four years ..... 32
51. Probable future prices ..... 32
52. Some margin necessary ..... 32
CHAPTER V.-METHOD OF PROTECTION.
53. Proposed reduction of import duties ..... 34
54. Instructions of the Government of India ..... 34.
55. Position of Tea industry ..... 35
56. Requests of Tea industry ..... 35.
57. Indian Tea Association's representation ..... 36
58. Increase of import duty above existing level discussed ..... 37
59. Import duties ..... 38
60. Abolition of drawback system ..... 38
61. Administrative difficulties ..... 39
62. Bounty ..... 39
63. Some charge on Tea industry reasonable ..... 40.
64. Protection by combination of import duty and bounty ..... 40
65. The Board's proposals ..... 41.
66. Refund to Indian Tea Cess Committee ..... $41^{\circ}$
67. No administrative difficulties ..... 42.
68. Effect on Government revenues ..... 42
69. Effect on Tea industry ..... 43.

## iii

Paira. Page.
71. Effect on Tea Chest industry ..... 44
72. Fiscal Commission's objection to protective export taxes ..... 44
73. Early removal of import duty desirable . ..... 45
CHAPTER VI.-SUPPLEMENTARY PROPOSALS-PERIOD OF PROTECTION-SUMMARY.
74. Enumeration of trees suitabie for ply wood manufacture ..... 46
75. Plantation ..... 46
76. Co-operation with Forest Research Institute ..... 47
77. Research work at Dehra Dun Forest Research Institute ..... 47
78. Opium boxes ..... 48
79. Specification of ply wood boxes for Opium Department ..... 48
80. Period of protection ..... 49
81. Summary ..... 49
Draft of changes or additions to Schedules II and III of the Indian Tariff Act, 1894 (VIII of 1894), necessitated by the Board's proposals ..... 52
Appendix A.-Comparison of the Board's estimate with that prepared by Mr. J. Kenneth Pearce, Chief Forest Engineer, Madras ..... 55
Appendix B.-Copy of letter No. 483-T., dated the 7th June, 1927, from the Secretary to the Government of India, De- partment of Commerce, to the Secretary, Tariff Board ..... 57
Appendix C.-Tables showing India's share in the world trade in tea. ..... 58
Apprndix D.-Value of tea chests imported into India ..... 60
Appendry E.-List of factories and forests visited by the Board ..... 61

## APPENDIX A.

## Comparison of the Board's estimate of Capital Ex. penditure and running charges with that prepared by Mr. J. Kenneth Pearce, Chief Forest Engineer, Madras.

We have estimated the capital expenditure required for a factory producing 5 lakhs of tea chests a year at Rs. 10 lakhs and the fair selling price of $19^{\prime \prime} \times 19^{\prime \prime} \times 24^{\prime \prime}$ chest at Rs. 2-15-6\%4. Our attention has been called to an estimate of the capital cost and running charges for a ply wood factory producing $2,40,000$ tea chests annually which appears on page 54 et seq of the report on Progress and proposed future Expansion in the utilization of the Forest Resources of Madras, by Mr. J. Kenneth Pearce. The capital cost there given is Rs. $2,50,000$ and it would appear, therefore, allowing for the difference in output, that our estimate is at least 100 per cent. too high and that the capital cost for a factory producing 5 lakhs of boxes a year should not exceed Rs. 5 lakhs. It seems necessary, therefore, by a critical examination either to reconcile the discrepancies between the two estimates or to indicate our reasons for believing that manufacture on a commercial scale. could not be undertaken at a lower capital cost. The first and most obvious difference relates to the extraction of timber. Whereas Mr. Pearce's estimate is framed on the understanding that the Forest Department will deliver timber at the factory at a fixed price (viz., 10 annas per cubic foot), which includes the return of any capital expenditure incurred in extraction, a commercial firm must provide in its capital account for expenditure on tram lines, boats and elephants for extracting timber and conveying it to the works. If allowance is made for such items, the cápital cost is reduced by Rs. 17 lakhs.
2. Mr. Pearce's estimate also contains no charge for the construction of quarters for the staff. It may be perfectly true that where an economic rent is paid, it is unnecessary to include the cost of such
Quarters for staff. buildings in the capital account. This, however, implies that the rate of wages: must be higher than that offered by firms who provide free quarters for their staff, which is the general practice in the factories which we have seen, An economic rent on that portion of cost of the quarters specified in paragraph 236 allocated to the ply wood factory would amount to about 20 per cent. of the salary of the staff (paragraph 221). Apart from the fact that under the Fundamental Rules, recovery of rent from Government employees is limited to 10 per cent. of their pay, it is certain that if rent were charged, the average manufacturer in India would find it necessary to pay a much higher scale of pay than that specified in paragraph 221 of the report. The charge would, therefore, merely be transferred from capital to working expenses. Items which would probably not be necessary for a Government factory such as a dispensary, compounders' quarters, etc., must also not be overlooked. Expenditure on quarters and dispensary accounts for about Rs. 17 lakhs, and if these were omitted our estimate would be reduced by this amount.
3. So far we have accounted for an excess of Rs. 3 lakhs in our estimate, that is to say, if the two estimates were framed on exactly similar lines, our Other itema. estimate would be reduced from Rs. 10 lakhs to the estimate, we should explain that it is not our intention to imply that the estimate is in any way unsuited for the purpose for which it was framed. There may be local conditions which have been taken into account but of which we are ignorant. Our purpose is rather to show that this estimate, however suited to local conditions, cannot be considered to represent even approximately the capital expenditure required for the erection and equipment of a works under commercial management. The following are the principal omissions. No expenditure has been included on account of the cost of
clearing the site., Provision for buildings other than quarters (Rs. 50,000 ) appears very low. During the periods when demand for tea chests slackens, the stock of panels accumulates and it is important that proper storage should be provided. Very few spare parts have been provided. Only three spare knives have been provided for the lathe and an equal number for each clipper. Usually at least 12 spare knives are provided for each machine. If sufficient spare parts are not available, the work of the factory may be seriously affected with a consequent increase in costs. No provision has been made for an electric crane or for trollies or trolly lines in and near the factory. If the timber and ply wood is moved by hand, a very considerable increase in labour charges will be necessary. Transport and erection charges (Rs. 13,000) are very low; erection charges alone are usually estimated at about 20 per cent. of the cost of plant. No expenditure has been included on account of the cost of vats for boiling logs nor has allowance been made for workshop equipment. Provision has been made for one clipper only, whereas two clippers. are necessary for each lathe, one to cut the veneer after leaving the lathe, and the other to trim it after drying and before gluing. When manufacture is ; undertaken on a commercial scale, it is necessary to utilize timber of all girths. In addjtion to the ordinary lathe, a large lathe is therefore installed to deal with logs of exceptional diameter. This estimate contains provision for one lathe only. These are some of the directions in which we consider the estimate fails to furnish a correct indication of the capital cost of establishing a ply wood factory as a commercial undertaking.
4. Turning now to the cost of manufacture and the fair selling price, in paragraph: 223 of Mr. Pearce's report the conclusion was reached that the

Fair selling price. cost of production of a tea chest $19^{\prime \prime} \times 19^{\prime \prime} \times 24^{\prime \prime}$, including interest on capital at 6 per cent., at the ply wood factory, which it is proposed to erect in Madras, would be Rs. 2-8-0 or some 7.5 annas less than the figure at which we have arrived. If our conclusions as to the cost of plant, buildings and erection are accepted, it would be necessary to estimate profit and depreciation on nearly 5 lakhs instead of $2 \frac{1}{2}$ lakhs capital cost. Taking reasonable commercial rates for depreciation, profit and working capital, namely $6 \frac{1}{4}$ per cent., 8 per cent. and 7 per cent.; and allowing as working capital a sum which the experience of commercial firms shows to be necessary, namely about Rs. $2 \frac{1}{2}$ lakhs, this estimate would require to be raised by about $2 \frac{1}{2}$ annas on account of overhead charges and manufacturer's profit alone. Further, nothing has been included in the estimate on account of packing charges which we have found to amount to 2 annas 34 pies per chest and commission and insurance 1 anna 1 pie. Vegetable glue is proposed to be used, though experience up to the present indicates that it is unsuitable for tea chest manufacture. The estimate for this is :31 annas while casein glue costs between 4 and 5 annas per chest. No allowance appears to have been made for miscellaneous charges, leave allowances and the like. :These amount to nearly 1 anna per chest. Apart from any increase in labour charges or under the head repairs and renewals, which we consider not improbable, it appears that even allowing for a reduction in timber charges consequent on the inclusion in the block account of the capital cost of plant, etc., required for extraction of timber, an addition of aboast 7 annas must be made to the estimate. In our opinion, therefore, there is nothing in the report to cause us to vary the estimates at which we have already arrived.

## 57

## APPENDIX B.

## Copy of letter No. 483-T., dated the 7th June 1927, from the Secretary to the Government of India, Department of Commerce, to the Secretary, Tariff Board, Calcutta.

Subject:-Reference to the Tariff Board for enquiry of the question of protection for the Indian ply wood and tea chest industry.
With reference to this. Department Resolution No. 483-T., dated the 26th May 1927, on the subject noted above, I am directed to invite the attention of the Board to certain remarks reproduced below made by Mr. (afterwards Sir James) Westland in the Imperial Legislative Council on the 27th December 1894, when presenting the report of the Select Committee on the Bill to amend the. Indian Tariff Act, 1894. Sir James in the course of his epeech enunciated the following general principle which should be followed in the framing of a tariff:-
"It is not possible to work a tariff upon' the principle that the same article may be taxed, or may be exempt, according to the purpose which the particular importer has in view. Wire gauze, for example, is used for a hundred different purposes. We cannot allow a paper manufacturer to claim an exemption for his importation on the ground that he requires it for the working of his paper machines, and tell all other importers that because they are not paper manufacturers they must pay duty."
2. I am to add that the Government of India are still guided by this principle and are ordinarily unwilling to word items in the tariff schedules in such a way that the amount of the duty depends upon the purpose for which an article is imported. I am accordingly to suggest that should the Board consider it necessary, as a result of their enquiry, to recommend any alterations in the Tariff Schedules, this principle may be borne in mind.

## APPENDIX C.

Table showing India's share in the world trade in Tea for the three years ending 1913-14 and 1923-24.

Three financial years ending 1919-14. (Millions of lbs.)

Tablei.

| - | India, | Ceylon. | China. | Java. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1911-12 | 263 | 185 | 195 | 50 | 693 |
| Percentage of total | 38 | 27 | 28 | 7 | $\cdots$ |
| 1912-13 . . . . | 252 | 187 | 198 | 62 | 729 |
| Percentage of total . | 39 | 26 | 27 | 8 | $\cdots$ |
| 1913-14. | 292 | 197 | 191. | 65 | 745 |
| Percentage of total | 39 | 26 | 26 | 9 | ... |
| Average | 279 | 190 | 195 | 59 | 722 |
| Percentage of total | 39 | 26 | 27 | 8 | ** |

Three financial years ending 1925-24.
(Millions of lbs.)
Table II.

| - | Indis. | Ceylon. | China. | Java. | Totas. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1921-22. | 317 | 161 | 57 | 67 | 602 |
| Percentage of total . . | 53 | 27 | 9 | 11 | -** |
| 1922-23 . . | 295 | 172 | 76 | 81 | 624 |
| Percentage of total . | 47 | 28 | 12 | 13 | ** |
| 1923-24. . | 345 | 182 | 107 | 90 | 724 |
| Percentage of total | 48 | 25 | 15 | 12 | ... |
| Average | 319 | 172 | 80 | 79 | 650 |
| Percentage of total | 49 | 27 | 12 | 12 | ** |

Tables I and II are re-printed from Appendix VII, Taxation Enquiry Committee's Report, Volume II.

Three calendar years 1921, 1922 and 1983.
(Millions of lbs.)
Tablia III.


Three calendar years 1924, 1925 and 1926.
(Millions of lbs.)
Table IV.


## APPENDIX D.

Value of tea chests imported into Indid.
TABLE I
Woolen Chests.

| Year. | Countries of origin. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom | Ceylon. | Other British Possession. | North Busbia. | South Russia. | Finland. | Esthonia. | Sweden. | Norway. | $\begin{aligned} & \text { Gor- } \\ & \text { many. } \end{aligned}$ | Belginm. | Italy. | Japan. |  | Total:- |
|  | Rs. | Rs. | Rs. | Ra. | \#8. | Rs. | Rs. | Rs. | Res. | Bs. | Rs. | Rs. | Re. | Rs. | Rs. |
| 1921-22. | 51,62,866 | 10,147 |  | 4,30,085 | $\cdots$ | ... |  |  |  |  |  |  |  |  |  |
| 1922-23. | 58,59,174 | 10,492 17,632 | 971 | 93,415 $4,14,835$ | … | 4,80.215 | 85,963 $5,03,525$ | -6,667 | 2,256 | 1,09,817 | 6,685 | 6,021 | $\begin{array}{r}10,168 \\ .09548 \\ \hline\end{array}$ | 403 | 62,02,031 |
| 1924-25. | 73,46,788 | -436 | 355 | + 40,176 | 16,042 | 10,97,911 | 1,41,580 | 16,512 | 12,181 | 3,70, +97 | 115 |  | -44,665 | $\cdots$ | -62,96,583 |
| 1625-26 | 67,04,041 | 35,867 |  | 11,617 |  | 14.27,714 | 4, 4,003 | 2,133 | 13.457 | 2,08,553 | 10,974 |  | 26,386 |  | 84,41,745 |
| 1926-27 | 48,67,528 | 16,069 | 1,070 | ... | ... | 9,20,836 | 2,46,495 | 733 | 5,836 | 1,49,171 | -4,798 | 12,303 | , 29,719 | 9,394 | 62;63,952 |

TABLE II.
Share of each Promince.


## APPENDIX E.

List of factories and forests visited by the Board.

| No. | Factories or forests. | Date of visit. |
| :---: | :---: | :---: |
| 1 | Veneer factory of the Asfam Railways and Trading Company, Limited, at Margherita, Agsam. | 15th July 1927. |
| 2 | Extraction operations in the forest worked by the Assam Railways and Trading Company, Limited. | 16th July 1927. |
| 3 | Extracti n operations in the forest in the Pasighat area, Assam, worked by the Assam Saw Mills and Timber Company, Limited. | 18th July 1927. |
| 4 | Veneer factory of the Assam Saw Mills and Timber Company, Limited, at Murkong Selek, Aasam. | ICth July 1927. |
| 5 | Meckla Saw Mille of the Assam Saw Mille and Timber Company, Limited. | 20 th July 1927. |
| 6 | Experimental ply wood plant at the Forest Researeh Institute, Dehra Dan. <br> The Triangle Lead Mills, Kidderpore | 25th August 1927. <br> 8th September 1927.. |

